

**17 CFR Part 240**

[Release No. 34-96034; File No. S7-19-21]

RIN 3235-AM76

**Electronic Recordkeeping Requirements for Broker-Dealers, Security-Based Swap Dealers,
and Major Security-Based Swap Participants**

AGENCY: Securities and Exchange Commission.

ACTION: Final rule.

SUMMARY: The Securities and Exchange Commission (“Commission”) is adopting amendments to the recordkeeping rules applicable to broker-dealers, security-based swap dealers, and major security-based swap participants. The amendments modify requirements regarding the maintenance and preservation of electronic records, the use of third-party recordkeeping services to hold records, and the prompt production of records. The Commission also is designating broker-dealer examining authorities as Commission designees for purposes of certain provisions of the broker-dealer record maintenance and preservation rule.

DATES: *Effective date:* January 3, 2023.

Compliance date: The compliance date for the amendments to 17 CFR 240.17a-4 is May 3, 2023. The compliance date for the amendments to 17 CFR 240.18a-6 is November 3, 2023.

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SUPPLEMENTARY INFORMATION: The Commission is amending:

| Commission Reference | CFR Citation |
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|------------|------------------|
| Rule 17a-4 | 17 CFR 240.17a-4 |
| Rule 18a-6 | 17 CFR 240.18a-6 |

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I. INTRODUCTION

A. Background

Securities Exchange Act of 1934 (“Exchange Act”) Rule 17a-4 (“Rule 17a-4”)¹ sets forth record maintenance and preservation requirements applicable to broker-dealers, including broker-dealers also registered as security-based swap dealers (“SBSDs”) or major security-based swap participants (“MSBSPs”).² Exchange Act Rule 18a-6 (“Rule 18a-6”)³ sets forth record maintenance and preservation requirements for SBSDs and MSBSPs that are not also registered as broker-dealers (“SBS Entities”).⁴ Rule 18a-6 was modeled on Rule 17a-4.⁵ Pursuant to Sections 15F and 17(a) of the Exchange Act, in 2021, the Commission proposed amendments to Rules 17a-4 and 18a-6.⁶ Specifically, the Commission proposed to amend the electronic record

¹ See 17 CFR 240.17a-4.

² As used in this release, the term “broker-dealer” includes a broker-dealer that is also registered as an SBSD or MSBSP.

³ See 17 CFR 240.18a-6.

⁴ As used in this release, the term “SBS Entity” refers to an SBSD and MSBSP that is *not* also registered as a broker-dealer.

⁵ See *Recordkeeping and Reporting Requirements for Security-Based Swap Dealers, Major Security-Based Swap Participants, and Broker-Dealers*, Exchange Act Release No. 87005 (Sept. 19, 2019), 84 FR 68550, 68562-71 (Dec. 16, 2019) (“SBSD/MSBSP Recordkeeping Adopting Release”); *Recordkeeping and Reporting Requirements for Security-Based Swap Dealers, Major Security-Based Swap Participants, and Broker-Dealers; Capital Rule for Certain Security-Based Swap Dealers*, Exchange Act Release No. 71958 (Apr. 17, 2014), 79 FR 25194, 25211-20 (May 4, 2014) (“SBSD/MSBSP Recordkeeping Proposing Release”).

⁶ See *Electronic Recordkeeping Requirements for Broker-Dealers, Security-Based Swap Dealers, and Major Security-Based Swap Participants*, Exchange Act Release No. 93614 (Nov. 18, 2021), 86 FR 68300 (Dec. 1, 2021) (“Proposing Release”). Section 17(a) of the Exchange Act, in pertinent part, provides the

maintenance and preservation requirements of Rules 17a-4 and 18a-6 and the prompt production of records requirements of those rules.⁷ The Commission received comment letters in response to the proposed amendments.⁸ The Commission is adopting the proposed amendments with certain modifications in response to comments.⁹

B. Overview of the Final Rule Amendments and Designation

Rule 17a-4 currently requires a broker-dealer to notify its designated examining authority (“DEA”) before employing an electronic recordkeeping system.¹⁰ The amendments to the rule eliminate this requirement.¹¹

Rule 17a-4 currently requires a broker-dealer to maintain and preserve electronic records exclusively in a non-rewriteable, non-erasable format (also known as a write once, read many (“WORM”) format). The amendments to Rule 17a-4 add an audit-trail alternative to the WORM requirement.¹² Under the audit-trail alternative, a broker-dealer will need to use an electronic recordkeeping system that maintains and preserves electronic records in a manner that permits the recreation of an original record if it is modified or deleted. Currently, Rule 18a-6 does not require an SBS Entity to use an electronic recordkeeping system that meets either the audit-trail or the WORM requirement. The amendments to Rule 18a-6 require an SBS Entity without a

Commission with authority to issue rules requiring broker-dealers to make and keep for prescribed periods such records as the Commission, by rule, prescribes as necessary or appropriate in the public interest, for the protection of investors, or otherwise in furtherance of the purposes of the Exchange Act. *See* 15 U.S.C. 78q(a). Section 15F(f)(1)(B)(i) of the Exchange Act provides that SBSDs and MSBSPs for which there is a prudential regulator shall keep books and records of all activities related to their business as an SBSD or MSBSP in such form and manner and for such period as may be prescribed by the Commission by rule or regulation. *See* 15 U.S.C. 78o-10(f)(1)(B)(i). Section 15F(f)(1)(B)(ii) of the Exchange Act provides that SBSDs and MSBSPs without a prudential regulator shall keep books and records in such form and manner and for such period as may be prescribed by the Commission by rule or regulation. *See* 15 U.S.C. 78o-10(f)(1)(B)(ii).

⁷ *See* paragraph (f) of Rule 17a-4 and paragraph (e) of Rule 18a-6 (setting forth the electronic record preservation requirements) and paragraph (j) of Rule 17a-4 and paragraph (g) of Rule 18a-6 (setting forth the prompt production of records requirements).

⁸ The comment letters are available at <https://www.sec.gov/comments/s7-19-21/s71921.htm>.

⁹ *See* paragraphs (f), (i), and (j) of Rule 17a-4, as amended; paragraphs (e), (f), and (g) of Rule 18a-6, as amended.

¹⁰ *See* paragraph (f)(2)(i) of Rule 17a-4. Rule 18a-6 does not have a similar requirement.

¹¹ *See* section II.C. of this release (discussing these amendments in more detail).

¹² *See* section II.D.2. of this release (discussing these amendments in more detail).

prudential regulator (“nonbank SBS Entity”) to maintain and preserve electronic records using an electronic recordkeeping system that meets either the audit-trail or the WORM requirement.¹³ Thus, under the amendments to Rules 17a-4 and 18a-6, a broker-dealer or nonbank SBS Entity that elects to use an electronic recordkeeping system will need to ensure that such electronic recordkeeping system meets either the audit-trail requirement or the WORM requirement.

Rule 17a-4 currently requires a broker-dealer to engage a third party who has access to and the ability to download information from the broker-dealer’s electronic storage media to any acceptable medium under the rule. The third party must execute, and file with its DEA, written undertakings agreeing to, among other things, promptly furnish to the Commission and other securities regulators the information necessary to download records kept on the electronic storage media to any medium acceptable under Rule 17a-4. The amendments to Rule 17a-4 modify the form of the undertakings to make them more technology neutral and to provide an alternative to engaging a third party to perform this function.¹⁴ Under the alternative, a broker-dealer can designate an executive officer to execute the undertakings if the executive officer has access to and the ability to provide records maintained and preserved on the broker-dealer’s electronic recordkeeping system either directly or through a specialist who reports directly or indirectly to the executive officer. Further, the executive officer can appoint in writing up to two employees who are direct or indirect reports to fulfill the executive officer’s obligations if the executive officer is unable to fulfill those obligations. The employees must have the same ability as the executive officer to independently access and provide the records either directly or through a specialist who reports directly or indirectly to them. In addition, the designated executive

¹³ See section II.D.2. of this release (discussing these amendments in more detail).

¹⁴ See section II.E.6. of this release (discussing these amendments in more detail). The Commission proposed to eliminate the third-party undertakings requirement of Rule 17a-4 and replace it with a senior officer undertakings requirement, and to add a parallel senior officer undertakings requirement to Rule 18a-6. See Proposing Release, 86 FR at 68310. For the reasons discussed in section II.E.6. of this release, the Commission is retaining the third-party undertakings provision in Rule 17a-4, as amended, to serve as an alternative to an executive officer undertakings requirement, and adding both the third-party undertakings requirement and the alternative executive officer undertakings requirement to Rule 18a-6, as amended.

officer can appoint in writing up to three specialists to assist in fulfilling the executive officer's obligations. Rule 18a-6 currently does not have either a third-party or executive officer undertakings requirement. The amendments to Rule 18a-6 add the third-party undertakings provision and alternative executive officer undertakings provision to the rule and require those undertakings to be filed with the Commission.¹⁵ Thus, under the amendments to Rules 17a-4 and 18a-6, a broker-dealer or SBS Entity that elects to use an electronic recordkeeping system must have either a third party or an executive officer provide the written undertakings.

Rules 17a-4 and 18a-6 require a third party who prepares or maintains the regulatory records of a broker-dealer or SBS Entity (regardless of whether the records are in paper or electronic form) to file a written undertaking with the Commission signed by a duly authorized person.¹⁶ The undertaking must include a provision whereby the third party agrees, among other things, to permit examination of the records by representatives or designees of the Commission as well as to promptly furnish to the Commission or its designee true, correct, complete, and current hard copies of any or all or any part of such books and records.

Some broker-dealers and SBS Entities maintain their electronic recordkeeping systems and associated electronic records on servers or other storage devices that are owned or operated by a third party (*e.g.*, a cloud service provider) while the broker-dealer or SBS Entity retains control of the electronic recordkeeping system and access to the electronic records preserved on the system. Consequently, the third parties state that they cannot provide the undertaking required under Rules 17a-4 and 18a-6.

¹⁵ See section II.E.6. of this release (discussing these amendments in more detail).

¹⁶ This undertaking requirement is designed to address access to broker-dealer or SBS Entity records when they are held by a person other than the broker-dealer or SBS Entity and regardless of whether the records are in paper form, stored on micrographic media, or stored on an electronic recordkeeping system. It is separate from the third-party or executive officer undertakings requirements discussed above, which are designed to address access to records preserved and maintained on an electronic recordkeeping system irrespective of whether they are held by a third party.

The Commission is amending Rules 17a-4 and 18a-6 to address this development in electronic recordkeeping practices.¹⁷ Under the amendments, the third party may provide an alternative undertaking in lieu of the traditional undertaking that is tailored to how certain recordkeeping services, including cloud service providers, hold electronic records for broker-dealers and SBS Entities. The use of this alternative undertaking is subject to certain conditions, including that the records are maintained on an electronic recordkeeping system and the broker-dealer or SBS Entity has independent access to the records meaning, among other things, the broker-dealer can access the records without the need of any intervention of the third party. Consequently, the alternative undertaking cannot be used if the records maintained and preserved by the third party are not maintained and preserved by means of an electronic recordkeeping system (*e.g.*, it cannot be used if the records are in paper form). It also cannot be used if the broker-dealer or SBS Entity must rely on the third party to take an intervening step to make the records available to the broker-dealer or SBS Entity (*e.g.*, it cannot be used if the broker-dealer or SBS Entity must ask the third party to transfer copies of the records to the broker-dealer or SBS Entity or must ask the third party to first decrypt the records before they can be accessed).

In the alternative undertaking, which must be filed with the Commission, the third party must, among other things, acknowledge that the records are the property of the broker-dealer or SBS Entity and that the broker-dealer or SBS Entity has represented to the third party that the broker-dealer or SBS Entity: (1) is subject to rules of the Commission governing the maintenance and preservation of certain records; (2) has independent access to the records maintained by the third party; and (3) consents to the third party fulfilling the obligations set forth in the undertaking. Further, the third party must undertake to facilitate within its ability, and not impede or prevent, the examination, access, download, or transfer of the records by a representative or designee of the Commission as permitted under the law. In the case of a

¹⁷ See section II.G. of this release (discussing these amendments in more detail).

broker-dealer, the third party must also undertake to facilitate within its ability, and not impede or prevent, a trustee appointed under the Securities Investor Protection Act of 1970 (“SIPA”) to liquidate the broker dealer in accessing, downloading, or transferring the records as permitted under the law.¹⁸

Rules 17a-4 and 18a-6 require a broker-dealer or SBS Entity, respectively, to furnish promptly to a representative of the Commission legible, true, complete, and current copies of the records required to be maintained and preserved under the rules and any other records subject to examination. The amendments to Rules 17a-4 and 18a-6 require the broker-dealer or SBS Entity to furnish a record and its audit trail (if applicable) preserved on an electronic recordkeeping system in a reasonably usable electronic format, if requested by a representative of the Commission.¹⁹ This means the record will need to be produced in an electronic format that is compatible with commonly used systems for accessing and reading electronic records.

The following table summarizes the electronic recordkeeping amendments to Rules 17a-4 and 18a-6.

| Provision | Rule 17a-4 | | Rule 18a-6 | |
|--|---------------|---|---------------|---|
| | Current | As Amended | Current | As Amended |
| DEA Notification | Required | No longer required | Not required | Not required |
| WORM | Required | WORM or audit-trail required | Not required | WORM or audit-trail required for nonbank SBS Entities |
| 3rd Party Undertaking Regarding Electronic Records | Required | 3 rd Party or executive officer undertaking required | Not required | 3 rd Party or executive officer undertaking required |
| Produce Electronic Records in a Reasonably Useable Format | Not required | Required | Not required | Required |
| Alternative Undertaking for Cloud Service Providers | Not permitted | Permitted | Not Permitted | Permitted |

¹⁸ SBS Entities are not members of the Securities Investor Protection Corporation (“SIPC”) and, therefore, are not eligible to be liquidated under SIPA.

¹⁹ See section II.H. of this release (discussing these amendments in more detail).

Finally, various provisions of Rule 17a-4 refer to representatives or *designees* of the Commission. For example, an outside entity serving as a record custodian for a broker-dealer or SBS Entity must execute an undertaking agreeing to permit examination of the records by representatives or *designees* of the Commission as well as to promptly furnish hard copies of the records to the representatives and *designees*. The Commission is designating a broker-dealer's examining authorities as Commission designees for the purposes of these provisions of Rule 17a-4.²⁰

II. FINAL AMENDMENTS

A. Introductory Text

The electronic recordkeeping provisions of Rule 17a-4 are set forth in paragraph (f) of the rule ("Rule 17a-4(f)"). The introductory text of Rule 17a-4(f) provides, in pertinent part, that the records required to be maintained and preserved pursuant to 17 CFR 240.17a-3 (Rule 17a-3) and Rule 17a-4 ("Broker-Dealer Regulatory Records") may be immediately produced or reproduced on "micrographic media" or by means of "electronic storage media" that meet the conditions set forth in the rule and be maintained and preserved for the required time in that form. The term "micrographic media" refers to microfilm, microfiche, or any similar medium.²¹ The electronic recordkeeping provisions of Rule 18a-6 are set forth in paragraph (e) of the rule ("Rule 18a-6(e)"). The introductory text of Rule 18a-6(e) provides, in pertinent part, that the records required to be maintained and preserved pursuant to 17 CFR 240.18a-5 (Rule 18a-5) and Rule 18a-6 ("SBS Entity Regulatory Records") may be immediately produced or reproduced by means of an "electronic storage system" that meets the conditions set forth in the rule and be

²⁰ See section III of this release (discussing this designation). The Commission is not making a similar designation with respect to Rule 18a-6 because SBS Entities are not members of a self-regulatory organization ("SRO") and, therefore, do not have an SRO that serves as an examining authority.

²¹ See paragraph (f)(1)(i) of Rule 17a-4 (defining the term "micrographic media").

maintained and preserved for the required time in that form.²² Rule 18a-6(e) does not provide a micrographic media option.²³

Rule 17a-4(f) was adopted in 1997.²⁴ The Commission intended Rule 17a-4(f) to be technology neutral but was guided by the predominant electronic storage method at that time: using optical platters, CD-ROMs, or DVDs (collectively, “optical disks”).²⁵ Therefore, the requirements of the rule contemplated the use of optical disks to a certain degree.

The Commission proposed amendments to Rule 17a-4(f), including to the rule’s introductory text, to make the rule more technology neutral.²⁶ For example, the Commission proposed to replace the phrase “electronic storage media” with the phrase “electronic recordkeeping system” throughout the rule, including in the introductory text. The Commission also proposed a conforming amendment to Rule 18a-6(e) to replace the phrase “electronic storage system” with the phrase “electronic recordkeeping system” throughout the rule, including in the introductory text.

As discussed next, commenters addressed the proposal’s use of the term “electronic recordkeeping system” and its proposed definition. Otherwise, commenters did not address the proposed amendments to the introductory text of Rules 17a-4(f) and 18a-6(e) and the Commission is adopting them substantially as proposed.²⁷

B. Definition of Electronic Recordkeeping System

²² The use of the phrase “electronic storage system” throughout Rule 18a-6 was intended to clarify that the rule does not require a particular storage medium such as an optical disk or CD-ROM. *See* Proposing Release, 86 FR at 68303; SBSD/MSBSP Recordkeeping Adopting Release, 84 FR at 86568.

²³ Rule 18a-6 does not include a micrographic media option because it was believed that SBS Entities would not choose to use that technology to preserve electronic records. *See* Proposing Release, 86 FR at 68303; SBSD/MSBSP Recordkeeping Adopting Release, 84 FR at 86568 n.200; SBSD/MSBSP Recordkeeping Proposing Release, 79 FR at 25219.

²⁴ *See Reporting Requirements for Brokers or Dealers under the Securities Exchange Act of 1934*, Exchange Act Release No. 38245 (Jan. 31, 1997), 62 FR 6469 (Feb. 12, 1997) (“Rule 17a-4(f) Adopting Release”). *See also Reporting Requirements for Brokers or Dealers under the Securities Exchange Act of 1934*, Exchange Act Release No. 32609 (July 9, 1993), 58 FR 38092 (July 15, 1993) (proposing Rule 17a-4(f)).

²⁵ *See* Rule 17a-4(f) Adopting Release, 62 FR at 6470.

²⁶ *See* Proposing Release 86 FR at 68303.

²⁷ *See* introductory text of paragraph (f) of Rule 17a-4, as amended; introductory text of paragraph (e) of Rule 18a-6, as amended. To improve readability, the phrase “subject to the conditions set forth in this paragraph” has been moved to the beginning of the introductory text of both paragraphs. *Id.*

Paragraphs (f)(1)(i) and (ii) of Rule 17a-4 and paragraph (e)(1) of Rule 18a-6 currently define the terms “micrographic media”, “electronic storage media,” and “electronic storage system”, respectively. Paragraph (f)(1)(ii) of Rule 17a-4 defines the term “electronic storage media” as, in pertinent part, any digital storage medium or system that meets the requirements of the rule. Similarly, paragraph (e)(1) of Rule 18a-6 defines the term “electronic storage system” as, in pertinent part, any digital storage system that meets the requirements of the rule.

The Commission proposed to replace the terms “electronic storage media” and “electronic storage system” in Rules 17a-4(f) and 18a-6(e), respectively, with the term “electronic recordkeeping system”.²⁸ The Commission proposed to define the new term in both rules as “a system that preserves records in a digital format and that requires a computer to access the records.”²⁹

One commenter stated that the proposed definition was “appropriately generic to survive foreseeable technological changes and will provide broker-dealers the flexibility to employ solutions that are innovative, efficient and/or cost-effective while still meeting the requirements of Rule 17a-4(f).”³⁰ Another commenter expressed broad support for the proposal to update references to “electronic storage media” to the “more generally applicable term” “electronic recordkeeping system.”³¹ Other commenters, however, suggested modifications to the term and definition. Two commenters suggested replacing the term “electronic recordkeeping system” with the term “electronic recordkeeping.”³² One commenter stated that the definition should not use the word “system” because “it implies the expectation of a physical and specified grouping of hardware and software rather than a system of supervision undertaken by a Regulated Entity

²⁸ See Proposing Release, 86 FR at 68304.

²⁹ *Id.*

³⁰ See letter from John Gebauer, President, National Regulatory Services, Jan. 6, 2022 (“NRS Letter”).

³¹ See letter from John Trotti, NCC Group, Dec. 29, 2021 (“NCC Group Letter”).

³² See letter from Ian J. Frimet, Senior Vice President, Associate General Counsel, LPL Financial, Jan. 3, 2022 (“LPL Financial Letter”); letter from Melissa MacGregor, Managing Director and Associate General Counsel, SIFMA, Dec. 22, 2021 (“SIFMA Letter”).

to ensure records are maintained.”³³ The commenter stated that “any definition of electronic recordkeeping system should consider non-technological elements, such as assigning roles and responsibilities to key individuals and groups.”³⁴

The intent in defining “electronic recordkeeping system” was to refer to the technological means by which records are stored in digital form and accessed and retrieved without specifying a specific type of technology.³⁵ This is because the proposed amendments were structured so that paragraphs (f)(2) and (e)(2) of Rules 17a-4 and 18a-6, respectively, set forth the technical requirements for the electronic recordkeeping system.³⁶ Paragraphs (f)(3) and (e)(3) of Rules 17a-4 and 18a-6, respectively, set forth requirements for broker-dealers and SBS Entities that use electronic recordkeeping systems (*i.e.*, requirements that were not intrinsic to the electronic recordkeeping system). Commenters suggested using the term “electronic recordkeeping” to encompass more than the technological means by which the records are stored in digital form and accessed and retrieved.³⁷ However, using the broader term “electronic recordkeeping” would not be consistent with the objective of differentiating the requirements in paragraphs (f)(2) and (e)(2) of Rules 17a-4 and 18a-6 (which set forth technical requirements applicable to the electronic recordkeeping system itself) from the requirements of paragraphs (f)(3) and (e)(3) of Rules 17a-4 and 18a-6 (which set forth requirements *for firms* using an electronic recordkeeping system). For these reasons, Rules 17a-4 and 18a-6, as amended, use the term “electronic recordkeeping system.”

One commenter recommended that if the term “electronic recordkeeping system” is retained, the Commission alter the definition of the term “to eliminate the word ‘computer,’

³³ See LPL Financial Letter.

³⁴ *Id.*

³⁵ See Proposing Release, 86 FR at 68303.

³⁶ See Proposing Release, 86 FR at 68304-11.

³⁷ See, *e.g.*, LPL Financial Letter.

which may not be technologically neutral in the future.”³⁸ A second commenter expressed agreement with and support for this suggestion, and recommended “the use of technology neutral terms to allow the proposed rules to be and remain relevant to current technologies and continued innovation.”³⁹

An objective of the proposed amendments to Rules 17a-4 and 18a-6 was to make them more technology neutral.⁴⁰ Accordingly, the definition of “electronic recordkeeping system” in Rules 17a-4 and 18a-6 is being modified to eliminate the reference to a “computer” as recommended by the commenters. In particular, the definition replaces the concept that an electronic recordkeeping system is a system that preserves records in a digital format *and that requires a computer to access the records* with the concept that it is a system that preserves the records in a digital format *in a manner that permits the records to be viewed and downloaded*.⁴¹ Therefore, the technology used to preserve records may employ a means other than a computer, but the technology must permit the records to be viewed and downloaded. These two features are necessary for firms to furnish records to representatives of the Commission and other securities regulators so that they may perform their oversight responsibilities. For these reasons and the reasons stated in the proposing release,⁴² the Commission is adopting amendments that use the term “electronic recordkeeping system” and that define the term with the modifications discussed above.⁴³

C. Elimination of Notice and Representation Requirements from Rule 17a-4(f)

³⁸ SIFMA Letter.

³⁹ Letter from Blair Anderson, Director, AWS, Jan. 3, 2022 (“AWS Letter”).

⁴⁰ See Proposing Release, 86 FR at 68301.

⁴¹ See paragraph (f)(1)(ii) of Rule 17a-4 and paragraph (e)(1)(i) of Rule 18a-6, as amended.

⁴² See Proposing Release, 86 FR at 68304.

⁴³ See paragraph (f)(1)(ii) of Rule 17a-4 and paragraph (e)(1)(i) of Rule 18a-6, as amended.

Paragraph (f)(2)(i) of Rule 17a-4 requires a broker-dealer to notify its examining authority⁴⁴ prior to employing electronic storage media, including a 90-day notice if the broker-dealer intends to employ electronic storage media other than optical disk technology. Paragraph (f)(2)(i) also requires a representation from the broker-dealer or the storage medium vendor or another third party with appropriate expertise that the selected electronic storage medium meets the conditions set forth in the rule. Rule 18a-6 does not contain parallel notice and representation requirements. The Commission proposed to eliminate the notification and representation requirements from Rule 17a-4(f).⁴⁵ Commenters supported the elimination of these requirements, while none of the commenters expressed opposition.⁴⁶ For the reasons stated in the proposing release as well as in the comments,⁴⁷ the Commission is adopting the amendments eliminating these requirements, as proposed.⁴⁸

D. Technical Requirements for Electronic Recordkeeping Systems

1. Applicability of the Requirements

The Commission proposed to set forth the technical requirements for electronic recordkeeping systems used by broker-dealers and SBS Entities in paragraph (f)(2) of Rule 17a-4 and paragraph (e)(2) of Rule 18a-6, respectively.⁴⁹ The Commission proposed that the technical requirements for electronic recordkeeping systems in Rule 17a-4(f) apply to all broker-dealers.⁵⁰ The Commission further proposed that the technical requirements for electronic recordkeeping systems in paragraph (e)(2) of Rule 18a-6 apply to nonbank SBS Entities (*i.e.*, SBS Entities

⁴⁴ The term “examining authority” means an SRO registered with the Commission under the Exchange Act (other than a registered clearing agency) with the authority to examine, inspect, and otherwise oversee the activities of a registered broker-dealer. *See* Section 17(j)(5) of the Exchange Act. 15 U.S.C. 78q(j)(5).

⁴⁵ *See* Proposing Release, 86 FR at 68304.

⁴⁶ *See* letter from Alexander Gavis, Senior Vice President & Deputy General Counsel, Fidelity Investments, Dec. 31, 2021 (“Fidelity Letter”); NRS Letter.

⁴⁷ *See* Proposing Release, 86 FR at 68304.

⁴⁸ *See* paragraph (f) of Rule 17a-4, as amended.

⁴⁹ *See* Proposing Release, 86 FR at 68304-07. Specifically, the proposed technical requirements were set forth in paragraphs (f)(2)(i) through (iv) of Rule 17a-4 and paragraphs (e)(2)(i) through (iv) of Rule 18a-6.

⁵⁰ *See* Proposing Release, 86 FR at 68304-05.

without a prudential regulator). Under the proposal, SBS Entities with a prudential regulator (“bank SBS Entities”) could employ electronic recordkeeping systems that did not necessarily meet the technical requirements set forth in paragraph (e)(2) of Rule 18a-6, as proposed to be amended. The intent was to avoid imposing requirements that could potentially conflict with regulations and guidance of the prudential regulators, particularly given that the Commission’s recordkeeping requirements for bank SBS Entities are more limited in scope.⁵¹ The Commission did not receive comments addressing the applicability of paragraph (f)(2) of Rule 17a-4 and paragraph (e)(2) of Rule 18a-6. For the reasons stated in the proposing release,⁵² the Commission is adopting the amendments regarding the applicability of the requirements, as proposed.⁵³

2. The Audit-Trail and WORM Requirements

The Commission proposed to amend Rule 17a-4(f) to add the audit-trail requirement as an alternative to the existing WORM requirement.⁵⁴ Thus, under the proposal, an electronic recordkeeping system used by a broker-dealer to preserve Broker-Dealer Regulatory Records would need to meet either the audit-trail or WORM requirement. In addition, the Commission proposed to amend Rule 18a-6(e) to require that the electronic recordkeeping systems of nonbank SBS Entities meet either the audit-trail or the WORM requirement.⁵⁵ Thus, under the proposals, nonbank SBS Entities would need to preserve SBS Entity Regulatory Records using an electronic recordkeeping system that meets either the audit-trail or WORM requirement.

Commenters generally supported adding the audit-trail alternative to Rules 17a-4 and 18a-6. One commenter stated that the “addition of an audit-trail based electronic record keeping system appears to be a sensible and workable option in addition to the option to store records in a

⁵¹ *Id.*

⁵² *Id.*

⁵³ *See* introductory text of paragraph (f)(2) of Rule 17a-4 and paragraph (e)(2) of Rule 18a-6, as amended.

⁵⁴ *See* Proposing Release, 86 FR at 68305-06.

⁵⁵ *Id.*

WORM compliant manner” and that it “appears likely that broker-dealers will benefit from greater access to systems and technology that meet these broader technical criteria.”⁵⁶ Another commenter stated that “[f]or many broker-dealers, adoption of the proposal will result in significant cost savings and efficiencies” and that “[t]he current WORM system is expensive to build and maintain annually, and is only used to comply with Rule 17a-4.”⁵⁷ This commenter also stated that the audit-trail requirement should “have a significantly lower annual cost of maintenance.” Other commenters similarly supported the Commission’s effort to modernize Rule 17a-4 by providing an alternative to the WORM requirement.⁵⁸

Several commenters, however, recommended that the Commission adopt a more principles-based approach in place of the audit-trail requirement and expressed support for a 2017 petition for rulemaking.⁵⁹ The petition was filed by a group of trade associations.⁶⁰ The petition requested that the Commission replace the WORM requirement with more liberal “principles-based requirements” similar to amendments the Commodity Futures Trading

⁵⁶ NCC Group Letter.

⁵⁷ LPL Financial Letter.

⁵⁸ *See* letter from William C. Anderson, Senior Vice President and Chief Compliance Officer, American Funds Distributors, Inc., Dec. 31, 2021 (“American Funds Distributors Letter”) (“In our experience the requirements of the current rule, particularly the requirement to store records in a write once read many format (WORM), have resulted in the implementation of complex procedures that do not serve the purposes for which the rule was designed. For example, many of our records are stored in systems that do not meet the WORM standards. As a result, we transfer records to a WORM compliant system, which is not as user friendly as the native systems used by the business on a day-to-day basis.”); letter from Alexander Gavis, Senior Vice President & Deputy General Counsel, Fidelity Investments, Dec. 31, 2021 (“Fidelity Letter”) (“WORM records are not easily searchable and, as a result, even as noted in the Release, SEC and FINRA examiners typically do not request records in WORM format. Examiners instead request customized data pulls from the non-WORM systems where the information was originally created prior to its storage in WORM format.”).

⁵⁹ *See* letter from Eversheds Sutherland (US) LLP on behalf of Committee of Annuity Insurers, Jan. 5, 2022 (“Committee of Annuity Insurers Letter”); letter from Dave T. Bellaire, Esq., Executive Vice President & General Counsel, Financial Services Institute, Jan 3, 2022 (“FSI Letter”); NRS Letter.

⁶⁰ *See* Petition 4-713 (Nov. 14, 2017) filed by the Securities Industry Financial Markets Association, Financial Services Roundtable, Futures Industry Association, International Swaps Derivatives Association, and Financial Services Institute available at <https://www.sec.gov/rules/petitions/2017/petn4-713.pdf> (“Rule 17a-4(f) Rulemaking Petition”). An addendum to the Rule 17a-4(f) Rulemaking Petition was filed on May 24, 2018, and is available at <https://www.sec.gov/rules/petitions/2018/ptn4-713-addendum.pdf> (“Rule 17a-4(f) Rulemaking Petition Addendum”). Comments on the petition were received and are available at <https://www.sec.gov/comments/4-713/4-713.htm>.

Commission (“CFTC”) had made to its electronic recordkeeping rule.⁶¹ One of these commenters recommended that the Commission adopt the principles-based approach set forth in the petition and stated, “The audit-trail alternative proposed by the SEC is not ‘technology-neutral’ and mandates specific technology requirements and electronic formats for broker-dealers, which reduce the ability for firms to implement future technological innovations or advancements.”⁶²

The Commission responded to the petition in the proposing release by stating that “[w]hile [the proposed audit-trail requirement] would not rely on ‘principles-based requirements’ to protect the reliability and authenticity of electronic records, it is designed to address concerns raised by commenters about the WORM requirement.”⁶³ The Commission continues to believe that providing the option to preserve records using an electronic recordkeeping system that complies with the audit-trail requirement appropriately addresses concerns about the WORM requirement while meeting the objective of the WORM requirement: the preservation of electronic records in a manner that protects the authenticity and reliability of original records.⁶⁴ As the Commission stated when proposing the audit-trail requirement, it is “designed to address concerns that the WORM requirement causes some firms to deploy an electronic recordkeeping system that serves no purpose other than to hold records in a manner that meets the Commission’s regulatory requirements for electronic recordkeeping systems.”⁶⁵ The Commission further explained that the records stored on WORM-compliant electronic recordkeeping systems are often retained in that particular format solely for the purpose of meeting the WORM requirement (*i.e.*, they are not the records and associated electronic

⁶¹ See CFTC, *Recordkeeping*, 82 FR 24479 (May 30, 2017).

⁶² FSI Letter.

⁶³ Proposing Release, 86 FR at 68302.

⁶⁴ See Proposing Release, 86 FR at 68302, 68305.

⁶⁵ Rule 17a-4(f) Rulemaking Petition at 4 (“Today, WORM systems are costly, outmoded, and inefficient storage containers used exclusively to meet the rule’s requirements.”); *see also* Proposing Release, 86 FR 68305.

recordkeeping systems the firms use for business purposes). The Commission noted that broker-dealers have explained to Commission staff that the electronic recordkeeping systems used for business purposes are dynamic and updated constantly (*e.g.*, with each new transaction or position) and easily accessible for retrieving records; whereas the WORM-compliant electronic recordkeeping systems are more akin to static “snapshots” of the records at a point in time and less accessible.⁶⁶ Broker-dealers retrieve records from their business-based electronic recordkeeping systems for their own purposes. In addition, the Commission understood that firms generally retrieve and produce records from their business-based electronic recordkeeping systems rather than from their WORM-compliant electronic recordkeeping systems in response to requests from securities regulators because these records are easier to retrieve. The Commission further acknowledged that Commission staff typically do not specifically request that records be produced from the WORM-compliant recordkeeping system.⁶⁷ The exception would be a case where alteration is suspected. In that case, the staff would request records from the WORM-compliant electronic recordkeeping system.

The objective of the proposed audit-trail requirement was to provide an alternative to broker-dealers and nonbank SBS Entities that permits them to preserve Broker-Dealer Regulatory Records and SBS Regulatory Records, respectively, on the same electronic recordkeeping system they use for business purposes, but also to require that the system have the capacity to recreate an original record if it is modified or deleted. This requirement was designed to provide the same level of protection as the WORM requirement, which prevents records from being altered, over-written, or erased. The principles-based approach

⁶⁶ See Rule 17a-4(f) Rulemaking Petition at 4 (“Data stored in WORM is essentially a static snapshot of a record that is locked and secured from any manipulation or deletion, as opposed to a complete system that could be used to stand up a production system during or following a disaster event.”).

⁶⁷ See also Rule 17a-4(f) Rulemaking Petition at 5 (“[O]ur members report that regulators (including SEC and FINRA examiners and enforcement staff) do not typically ask for production of records from WORM storage because the information or data is not readily sortable or searchable. Regulators instead request customized extracts or views of data collected from active storage systems where the record was originally created, that has not yet been transferred to a WORM system.”).

recommended by the commenters would not provide this level of protection because it simply requires “appropriate systems and controls that ensure the authenticity and reliability of regulatory records.”⁶⁸ The proposed amendments to Rules 17a-4 and 18a-6 and the principles-based approach recommended by the commenters share an objective: ensuring the authenticity and reliability of regulatory records. However, the audit-trail requirement is more likely to achieve this objective because, like the existing WORM requirement, it sets forth a specific and testable outcome that the electronic recordkeeping system must achieve: the ability to access and produce modified or deleted records in their original form.

The principles-based approach advocated by the commenters would not ensure the authenticity or reliability of electronic records with the same testable and specific outcome as the existing WORM requirement or the audit-trail requirement the Commission is adopting. This is because it would set forth a generalized standard for the electronic recordkeeping system to ensure the authenticity and reliability of the records: appropriate systems and controls. This approach focuses on the design of the electronic recordkeeping system and unlike the audit-trail or WORM requirement does not require a specific and testable outcome that the system must achieve in terms of promoting the authenticity and reliability of the records. Further, the design requirement – appropriate systems and controls – may not set forth obligations with respect to electronic recordkeeping that do not already exist under the general record preservation requirements of Rules 17a-4 and 18a-6. In particular, the broker-dealer or SBS Entity must retain Broker-Dealer Regulatory Records and SBS Entity Regulatory Records, respectively, in a manner that will enable the firm to produce copies of original records during their retention periods. A failure to be able to produce the records because, for example, they are overwritten or lost would violate the existing preservation and prompt production of records requirements of Rules 17a-4 and 18a-6. Consequently, the systems and controls for preserving these records

⁶⁸ See CFTC, *Recordkeeping*, 82 FR at 24486.

must be appropriate to serve this purpose irrespective of whether the records are stored in paper or electronic form. The audit-trail and WORM requirements go a step further because they prescribe specific outcomes the electronic recordkeeping system must achieve to promote the authenticity and reliability of the records. Moreover, the audit-trail requirement is designed to permit broker-dealers and SBS Entities to use their existing business-purpose recordkeeping systems to achieve the required outcome without specifying any particular technology solution. In this way, the audit-trail requirement provides the flexibility of a principles-based requirement by setting forth a high-level outcome the electronic recordkeeping system must achieve without prescribing how the system must be configured to meet that objective. For these reasons, the final amendments include the audit-trail requirement as an alternative to the WORM requirement.

As proposed, to meet the audit-trail requirement, the electronic recordkeeping system would need to maintain and preserve the records for the duration of their applicable retention periods in a manner that maintains a complete time-stamped audit trail that includes: (1) all modifications to and deletions of a record or any part thereof; (2) the date and time of operator entries and actions that create, modify, or delete the record; (3) the individual(s) creating, modifying, or deleting the record; and (4) any other information needed to maintain an audit trail of each distinct record in a way that maintains security, signatures, and data to ensure the authenticity and reliability of the record and will permit re-creation of the original record and interim iterations of the record.⁶⁹

One commenter stated that vendors “typically already maintain the audit trail logs with the data points described in the rule.”⁷⁰ In response to the proposed components of the audit trail set forth in items (2) and (3) above, another commenter stated that electronic recordkeeping systems “don’t always record names [of individuals] but always record a unique identifier that

⁶⁹ See Proposing Release, 86 FR at 68306.

⁷⁰ Letter from Adam Schaub, Vice President, RegEd, Jan. 3, 2022 (“RegEd Letter”).

can be used to find the name” and “in many instances an automated system or process rather than a natural person will be the actor.”⁷¹ In response to this comment, the final amendments eliminate the requirement that the audit trail include the date and time of *operator entries* that create, modify, or delete the record.⁷² The rules require the audit trail to include the date and time of *actions* that create, modify, or delete the record, as proposed. This requirement is intended to encompass both human-initiated and automated actions that create, modify, or delete the record. In further response to the comment, the final amendments require that the audit trail include, *if applicable*, the identity of the individual creating, modifying, or deleting the record.⁷³ The identity of the individual can be reflected in the audit trail as a unique identifier for the individual.

Commenters also sought clarity about the scope of the audit-trail requirement. One commenter asked when the audit trail must begin, and provided the examples of making sequential entries onto a blotter and of a draft blotter that does not become an “official record of the firm.”⁷⁴ Another commenter stated that “[w]hile it is generally possible to produce a log showing who has made specific changes at a specific time, it may not always be possible for the means of electronic recordkeeping to reproduce every version of a record that has undergone changes at multiple points in time.”⁷⁵ A third commenter suggested that broker-dealers should be permitted “to maintain a log of all changes to the record rather than requiring each iteration of a record to be reproduced.”⁷⁶

As indicated above, the proposal specified that the audit trail must include any other information needed to maintain an audit trail of each distinct record in a way that maintains

⁷¹ NRS Letter.

⁷² See paragraph (f)(2)(i)(A)(2) of Rule 17a-4 and paragraph (e)(2)(i)(A)(2) of Rule 18a-6, as amended.

⁷³ See paragraph (f)(2)(i)(A)(3) of Rule 17a-4 and paragraph (e)(2)(i)(A)(3) of Rule 18a-6, as amended. As proposed, the audit trail needed to include the *individual(s)* creating, modifying, or deleting the record.

⁷⁴ RegEd Letter.

⁷⁵ SIFMA Letter.

⁷⁶ American Funds Distributors Letter.

security, signatures, and data to ensure the authenticity and reliability of the record and will permit re-creation of the original record *and interim iterations of the record*. The intent, however, was that the audit-trail requirement apply to Broker-Dealer Regulatory Records (*i.e.*, the records required to be maintained and preserved pursuant to Rules 17a-3 and 17a-4) in the case of broker-dealers, and SBS Entity Regulatory Records (*i.e.*, the records required to be maintained and preserved pursuant to Rules 18a-5 and 18a-6) in the case of SBS Entities. The proposed audit-trail requirement was not intended to create new recordkeeping requirements under Rules 17a-3 and 17a-4 or Rules 18a-5 and 18a-6. Although broker-dealers and SBS Entities must comply with the individual records requirements set forth in these rules, the audit-trail requirement applies to the final records required pursuant to the rules, rather than to drafts or iterations of records that would not otherwise be required to be maintained and preserved under Rules 17a-3 and 17a-4 or Rules 18a-5 and 18a-6.

For example, paragraph (a)(1) of Rule 17a-3 requires a broker-dealer to make and keep current blotters (or other records of original entry) containing, among other information, an itemized daily record of all purchases and sales of securities (including security-based swaps), all receipts and deliveries of securities (including certificate numbers), all receipts and disbursements of cash and all other debits and credits. A broker-dealer's electronic recordkeeping system throughout the day may constantly update the information used to create these blotters as each new purchase, sale, receipt, or delivery of a security is made. The broker-dealer, however, does not need to create an audit trail for each iteration of this information when a new purchase, sale, receipt, or delivery of a security is made during the day because paragraph (a)(1) of Rule 17a-3 does not require these type of records to be made and kept current.

Instead, the rule requires blotters (or other records of original entry) containing, among other information, an itemized *daily* record of *all* purchases and sales of securities (including security-based swaps), all receipts and deliveries of securities (including certificate numbers). Thus, the broker-dealer must make and keep current a daily record that reflects all transactions

made throughout the day. It is this daily record to which the audit-trail requirement applies. In order to remove potential ambiguity in the rules on this point, the final amendments eliminate the phrase “and interim iterations of the record.”⁷⁷

For these reasons and the reasons stated in the proposing release,⁷⁸ the Commission is adopting amendments that add the audit-trail requirement to Rule 17a-4(f) and the audit-trail and WORM requirements to Rule 18a-6(e) with the modifications discussed above.⁷⁹

Under the final amendments, broker-dealers and nonbank SBS Entities have the flexibility to preserve all of their electronic Broker-Dealer Regulatory Records or SBS Entity Regulatory Records either by: (1) using an electronic recordkeeping system that meets *either* the audit-trail requirement *or* the WORM requirement; or (2) preserving some electronic records using an electronic recordkeeping system that meets the audit-trail requirement and preserving other electronic records using an electronic recordkeeping system that meets the WORM requirement.⁸⁰

Finally, commenters asked how two Commission interpretations of the WORM requirement would apply in light of the amendments to Rules 17a-4(f) and 18a-6(e).⁸¹ The

⁷⁷ See paragraph (f)(2)(i)(A)(4) of Rule 17a-4 and paragraph (e)(2)(i)(A)(4) of Rule 18a-6, as amended.

⁷⁸ See Proposing Release, 86 FR at 68305-06.

⁷⁹ See paragraphs (f)(2)(i)(A) and (B) of Rule 17a-4 and paragraphs (e)(2)(i)(A) and (B) of Rule 18a-6, as amended. In addition, to improve the readability of these paragraphs, the final amendments consistently refer to a record in the singular by replacing the phrase “the records” and word “their” in paragraph (f)(2)(i)(A) of Rule 17a-4 and paragraph (e)(2)(i)(A) of Rule 18a-6, as amended, with the phrase “a record” and the word “its”, respectively; replacing the word “a” in paragraph (f)(2)(i)(A)(1) of Rule 17a-4 and paragraph (e)(2)(i)(A)(1) of Rule 18a-6, as amended, with the word “the”; and replacing the phrase “each distinct” in paragraph (f)(2)(i)(A)(4) of Rule 17a-4 and paragraph (e)(2)(i)(A)(4) of Rule 18a-6, as amended, with the word “the”.

⁸⁰ For business reasons, broker-dealers and nonbank SBS Entities may elect to use two recordkeeping systems: one that complies with the audit-trail requirement and one that complies with the WORM requirement. For example, a WORM-compliant electronic recordkeeping system may be appropriate for certain types of records such as emails. Further, a broker-dealer may choose to continue to retain legacy Broker-Dealer Regulatory Records using a WORM-compliant electronic recordkeeping system, while employing an audit trail-compliant electronic recordkeeping system to preserve Broker-Dealer Regulatory Records created or received after the system is put in place.

⁸¹ See Committee of Annuity Insurers Letter; FSI Letter. See also RegEd Letter (requesting that the Commission confirm whether the 2003 interpretation will extend to the requirements for the audit trail alternative).

Commission’s interpretations of the WORM requirement were issued in 2003 and 2019.⁸² The 2003 interpretation clarified that the WORM requirement does not mandate the use of optical disks and, therefore, a broker-dealer can use “an electronic storage system that prevents the overwriting, erasing or otherwise altering of a record during its required retention period through the use of integrated hardware and software codes.”⁸³ The 2019 interpretation further refined the 2003 interpretation. In particular, it noted that the 2003 interpretation described a process of integrated *software and hardware* codes and clarified that “a software solution that prevents the overwriting, erasing, or otherwise altering of a record during its required retention period would meet the requirements of the rule.”⁸⁴ The Commission confirms that a broker-dealer or nonbank SBS Entity can rely on the 2003 and 2019 interpretations with respect to meeting the WORM requirement of Rule 17a-4(f) or 18a-6(e), as amended. Because the 2003 and 2019 interpretations addressed the WORM requirement, they are not relevant to the audit-trail requirement being adopted in this document.

A commenter also asked how Commission guidance with respect to Rule 17a-4(f) and the Electronic Signatures in Global and National Commerce Act of 2000 (“ESIGN Act”) might be impacted by the amendments.⁸⁵ In 2001, the Commission issued guidance that Rule 17a-4(f) was consistent with the ESIGN Act.⁸⁶ The final amendments to Rule 17a-4(f) do not alter the rule in a way that would change this guidance.⁸⁷ Moreover, because Rule 18a-6(e) is closely modelled on Rule 17a-4(f), it also is consistent with the ESIGN Act for the reasons set forth in the Commission’s 2001 guidance.

⁸² See *Electronic Storage of Broker-Dealer Records*, Exchange Act Release No. 47806 (May 7, 2003), 68 FR 25281, (May 12, 2003) (“Rule 17a-4(f) Interpretation”); SBSD/MSBSP Recordkeeping Adopting Release, 84 FR at 68568.

⁸³ See Rule 17a-4(f) Interpretation, 68 FR at 25282.

⁸⁴ See SBSD/MSBSP Recordkeeping Adopting Release, 84 FR at 68568.

⁸⁵ See Committee of Annuity Insurers Letter. See also Pub. L. 106-229, 114 Stat. 464 (2000).

⁸⁶ See *Commission Guidance to Broker-Dealers on the Use of Electronic Storage Media Under the Electronic Signatures in Global and National Commerce Act of 2000 With Respect to Rule 17a-4(f)*, Exchange Act Release No. 44238 (May 1, 2001), 66 FR 22916 (May 7, 2001).

⁸⁷ See *id.*

3. Verification Requirement

The Commission proposed that the electronic recordkeeping system used by a broker-dealer or nonbank SBS Entity must verify automatically the completeness and accuracy of the processes for storing and retaining records electronically.⁸⁸ The requirement was designed to ensure that when an original record is added to the electronic recordkeeping system it is completely and accurately captured in the system. The Commission received one comment on this proposed requirement, stating, “[I]t is appropriate to require an electronic recordkeeping system to automatically verify the quality and accuracy of the records being made.”⁸⁹ For the reasons stated in the proposing release,⁹⁰ the Commission is adopting the verification requirements, as proposed.⁹¹

4. Serialization Requirement

The Commission proposed to amend Rules 17a-4(f) and 18a-6(e) to require, if applicable, that the electronic recordkeeping system serialize the original and duplicate units of storage media, and time-date the required period of retention for the information placed on such electronic storage media.⁹² The Commission explained that this requirement was limited to electronic recordkeeping systems that use optical disks to meet the WORM requirement. A commenter stated “that the proposed addition of the ‘if applicable’ modifier is beneficial and removes the ambiguity of its application to systems without multiple units of storage media.” This commenter also argued, however, that “specificity of the ‘serialize and time-date’ requirements of the existing and proposed rules are unnecessary and duplicative of the requirements to produce the records and retain them for the proper duration.”⁹³ The serialization

⁸⁸ See Proposing Release, 86 FR at 68306.

⁸⁹ See NRS Letter.

⁹⁰ See Proposing Release, 86 FR at 68306.

⁹¹ See paragraph (f)(2)(ii) of Rule 17a-4 and paragraph (e)(2)(ii) of Rule 18a-6, as amended.

⁹² See Proposing Release, 86 FR at 68306-07.

⁹³ See NRS Letter.

and time-date requirements remain necessary to the extent that optical disks are used to store records electronically as the serial number and time-date stamp are used to distinguish one disk from another and to associate the records stored on the disk with that specific storage unit. For these reasons and the reasons stated in the proposing release,⁹⁴ the Commission is adopting the serialization requirements, substantially as proposed.⁹⁵

5. Download and Transfer Requirement

The Commission proposed to amend Rules 17a-4(f) and 18a-6(e) to require that the electronic recordkeeping system must have the capacity to readily download and transfer copies of a record and its audit trail (if applicable) in both a human readable format and in a reasonably usable electronic format, and to readily download and transfer the information needed to locate the electronic record, as required by the staffs of the Commission and other relevant securities regulators.⁹⁶ The Commission stated that a human readable format would be a format that can be naturally read by an individual and that a reasonably usable electronic format would be a format that is common and compatible with commonly used systems for accessing and reading electronic records. The Commission further explained that the requirement to download and transfer audit trails would apply only if the firm's electronic recordkeeping system uses the audit-trail alternative and that the general reference to "information needed to locate the electronic record" would be designed to incorporate whatever means a particular electronic recordkeeping systems uses to organize the records and locate a specific record (*e.g.*, indexes or data fields).

One commenter, with respect to the reasonably usable electronic format requirement, "wholeheartedly agree[d] with the Commission's goal of making this standard flexible and

⁹⁴ See Proposing Release, 86 FR at 68306-07.

⁹⁵ See paragraph (f)(2)(iii) of Rule 17a-4 and paragraph (e)(2)(iii) of Rule 18a-6, as amended. To improve the readability of paragraph (f)(2)(iii) of Rule 17a-4 and paragraph (e)(2)(iii) of Rule 18a-6, as amended, the Commission replaced the phrase "and time-date for the required period of retention the information placed on such electronic storage media" with the phrase "and time-date the required period of retention for the information placed on such electronic storage media".

⁹⁶ See Proposing Release, 86 FR at 68307.

future-proof” and stated “that the Commission’s Proposal achieves this goal.”⁹⁷ However, the commenter further stated that “nearly all electronic recordkeeping systems will naturally provide *either* human readable or reasonably usable electronic formats.”⁹⁸ Therefore, the commenter stated that it would be “burdensome” and add “unnecessary cost and complexity” to require that an electronic recordkeeping system have the capacity to produce a record in both formats. The commenter concluded by recommending “that the proposed amendment be changed to reflect that electronic recordkeeping systems be required to have the capacity to produce either human readable or reasonably usable electronic formats, but not both.”⁹⁹ The commenter provided no data to quantify the burden, cost, or complexity of the proposed requirement.

The Commission believes that the capacity to produce records in both formats is a necessary and important feature of electronic recordkeeping systems in terms of the ability of the Commission and other securities regulators being able to carry out their oversight responsibilities. Depending on the nature and volume of records requested by a securities regulator as part of an examination or investigation, producing them in a human readable format that is not also machine readable (*e.g.*, a hard copy or pdf of a voluminous spreadsheet) may hinder or delay the examination or investigation because it would take more time to search the records for relevant information; whereas producing electronic records in a reasonably usable electronic format will permit the records to be searched and sorted using a computer. Conversely, in other cases, it may be more efficient to produce a record in a human readable format; for example, if an examiner is on site and requests a specific record or if the requested record is a policies and procedures manual. Further, Rules 17a-4 and 18a-6 currently require broker-dealers and SBS Entities, respectively, to furnish promptly to a representative of the Commission *legible* (*i.e.* capable of being read) copies of records.¹⁰⁰ Consequently, an electronic

⁹⁷ NRS Letter.

⁹⁸ *Id.* (emphasis added).

⁹⁹ *Id.*

¹⁰⁰ See paragraph (j) of Rule 17a-4 and paragraph (g) of Rule 18a-6.

recordkeeping system of a broker-dealer or SBS Entity must have the capacity to readily download and transfer copies of a record and its audit trail (if applicable) in a human readable format to meet this existing obligation.

For these reasons and the reasons stated in the proposing release,¹⁰¹ the Commission is adopting the download and transfer requirements, as proposed.¹⁰²

6. Backup or Redundant Recordkeeping System

Paragraph (f)(3)(iii) of Rule 17a-4 requires a broker-dealer to store separately from the original, on any medium acceptable under Rule 17a-4, a duplicate copy of a record for the requisite time period. Similarly, paragraph (e)(3)(iii) of Rule 18a-6 requires that an SBS Entity store separately from the original a duplicate copy of a record stored on the electronic storage system for the requisite time period. These current provisions require broker-dealers and SBS Entities to maintain a second copy of each record.

The Commission proposed amendments to both of these paragraphs to require the broker-dealer and the SBS Entity to have a backup electronic recordkeeping system.¹⁰³ As proposed, the broker-dealer or SBS Entity would have needed to have a second electronic recordkeeping system that preserves a second set of records that can be accessed and examined if the primary electronic recordkeeping system storing the primary set of records is disrupted, malfunctions, or otherwise becomes inaccessible. The second electronic recordkeeping system would need to meet the requirements of Rules 17a-4(f) and 18a-6(e), except that it would not need a backup recordkeeping system. The records stored on the backup electronic recordkeeping system would have been required to be preserved in accordance with the record maintenance and preservation requirements of Rule 17a-4 or 18a-6, as applicable. Among other requirements, this would mean

¹⁰¹ See Proposing Release, 86 FR at 68306-07.

¹⁰² See paragraph (f)(2)(iv) of Rule 17a-4 and paragraph (e)(2)(iv) of Rule 18a-6, as amended.

¹⁰³ See Proposing Release, 86 FR at 68308.

that the second set of records would have been required to be preserved for their required retention periods.

One commenter expressed support for the proposed requirement, stating, “[t]he proposal requiring the covered entities to maintain a backup set of records is well taken and should be an existing practice among broker-dealers for disaster recovery and business continuity purposes.”¹⁰⁴ Other commenters stated that a backup electronic recordkeeping system is not the only means of achieving redundancy of the records.¹⁰⁵ Another commenter stated that “[a] ‘backup electronic recordkeeping system’ describes one of several methods of records recovery in the event an electronic recordkeeping system is disrupted, malfunctions, or otherwise becomes inaccessible.”¹⁰⁶ This commenter suggested that the rule text instead require that the electronic recordkeeping system “[m]aintain redundancies that provide an alternative that meets the other requirements of [Rule 17a-4(f)] to locate and re-create records, in the event the primary records required to be maintained and preserved pursuant to §§ 240.17a-3 and 240.17a-4 are unavailable.”¹⁰⁷ A different commenter stated that the requirement for a backup electronic recordkeeping system should be replaced with a requirement that “the means of electronic recordkeeping have fail-safes in place to ensure that records are accessible at all times, including during an emergency or at a time of significant business disruption.”¹⁰⁸ The commenter further stated that the proposed requirement to maintain a separate backup system “is not technologically neutral, as there are currently other alternatives available to ensure redundancy with respect to records in times of stress” and that “the requirement undermines one of the

¹⁰⁴ NCC Group Letter.

¹⁰⁵ See letter from Curtis Turnell, Compliance Program Manager, Microsoft Corporation, Jan. 23, 2022 (“Microsoft Letter”); SIFMA Letter.

¹⁰⁶ Microsoft Letter.

¹⁰⁷ *Id.*

¹⁰⁸ SIFMA Letter.

central goals of the Proposed Rules to permit Regulated Entities to have a unified set of business records and regulatory records.”¹⁰⁹

In response to these comments, the final amendments to Rules 17a-4 and 18a-6 provide the option to use either a backup recordkeeping system or other redundancy capabilities.¹¹⁰ Further, the final amendments make these technical requirements that the electronic recordkeeping system itself must meet by relocating them to the paragraphs of Rules 17a-4 and 18a-6 that set forth the technical requirements for electronic recordkeeping systems.¹¹¹ The Commission views the means by which an electronic recordkeeping system achieves redundancy as being part of this overall system. For example, in the simplest case, a WORM-compliant electronic recordkeeping system may create two copies on an optical disk with each disk containing the same set of records. If the primary disk is corrupted, the secondary disk can be used to access the records and to make an additional copy to preserve a new backup. The primary and backup disks are part of the hardware (storage media) of the electronic recordkeeping system. Similarly, an electronic recordkeeping system may include a second recordkeeping system that uses a different server or group of servers to store a duplicate set of records. If one server or group of servers fails, the overall system will switch to using the second (or backup) recordkeeping system to access the records on the second server or group of servers. Further, redundancy may be achieved in the manner in which the electronic recordkeeping system stores information, such as by using disk arrays. For these reasons, the final amendments

¹⁰⁹ *Id.*

¹¹⁰ See paragraph (f)(2)(v) of Rule 17a-4 and paragraph (e)(2)(v) of Rule 18a-6, as amended.

¹¹¹ This modification is achieved by moving the requirement to paragraph (f)(2) of Rule 17a-4 and paragraph (e)(2) of Rule 18a-6, as amended. Under the proposal, the requirement to have a backup recordkeeping system was in paragraph (f)(3) of Rule 17a-4 and paragraph (e)(3) of Rule 18a-6, which set forth the requirements for a broker-dealer or SBS Entity using an electronic recordkeeping system. See *Proposing Release*, 86 FR at 68307. As discussed above, paragraph (f)(2) of Rule 17a-4 and paragraph (e)(2) of Rule 18a-6 set forth the technical requirements for *electronic recordkeeping systems themselves*, making these paragraphs the more appropriate location for the backup/redundancy requirements. See *id.* at 68308. In addition, placing this requirement in paragraph (e)(2) of Rule 18a-6 appropriately restricts the requirement to nonbank SBS Entities.

require the electronic recordkeeping system to include a backup recordkeeping system or have other redundancy capabilities.

As indicated above, the electronic recordkeeping system must include either a backup electronic recordkeeping system or other redundancy capabilities. Under the proposal, the broker-dealer or SBS Entity would have been required to maintain a backup electronic recordkeeping system that meets the other requirements of Rule 17a-4(f) or Rule 18a-6(e) (as applicable) and that retains the Broker-Dealer Regulatory Records or SBS Entity Regulatory Records, respectively, in accordance with Rule 17a-4(f) or Rule 18a-6(e) (as applicable).¹¹² Commenters addressed this aspect of the proposal by stating that a backup recordkeeping system – by itself – may not serve as a redundant set of records.¹¹³ One of these commenters stated that “for a ‘backup electronic recordkeeping system’ to be an effective recovery method many dependencies must be considered, such as assuring geographic dispersion.”¹¹⁴ The other commenter stated that the “rule does not, for example, discuss geographic or topological disparity between the two copies.”¹¹⁵ In response to these comments, the final amendments modify the requirement to specify that the backup electronic recordkeeping system must also retain the Broker-Dealer Regulatory Records or SBS Entity Regulatory Records *in a manner that will serve as a redundant set of records if the original electronic recordkeeping system is temporarily or permanently inaccessible*.¹¹⁶ In keeping with the objective of making the rules technology neutral and able to adapt to new technologies, the final amendments do not specify how the backup electronic recordkeeping system must achieve this level of redundancy. However, sufficient geographic separation of the hardware components of the primary and backup electronic recordkeeping systems – as identified by commenters – may be an aspect of

¹¹² See Proposing Release, 86 FR at 68308.

¹¹³ See Microsoft Letter; NRS Letter.

¹¹⁴ Microsoft Letter.

¹¹⁵ NRS Letter.

¹¹⁶ See paragraph (f)(2)(v)(A) of Rule 17a-4 and paragraph (e)(2)(v)(A) of Rule 18a-6, as amended.

achieving the redundancy required by the final amendments. However a firm meets the redundancy requirement, the backup electronic recordkeeping system must serve as a redundant set of records if the original electronic recordkeeping system is temporarily or permanently inaccessible because, for example, it is impacted by a natural disaster or a power outage.

The second option under the final amendments relies on redundancy capabilities that are designed to ensure access to Broker-Dealer Regulatory Records or the SBS Entity Regulatory Records must have a level of redundancy that is at least equal to the level that is achieved through using a backup recordkeeping system.¹¹⁷ In other words, this alternative requires a standard that ensures at least as much access to Broker-Dealer Regulatory Records or SBS Entity Regulatory Records as a backup recordkeeping system.

For these reasons and the reasons stated in the proposing release,¹¹⁸ the Commission is adopting redundancy requirements with the modifications discussed above.¹¹⁹

E. Requirements for Broker-Dealers and SBS Entities Using Electronic Recordkeeping Systems

1. Applicability of the Requirements

Paragraph (f)(3) of Rule 17a-4 and paragraph (e)(3) of Rule 18a-6 impose obligations on broker-dealers and SBS Entities, respectively, related to their use of electronic recordkeeping systems. In general, these requirements are designed to ensure that the staffs of the Commission and other relevant securities regulators can access and examine the records. The proposed amendments would have applied these requirements to all broker-dealers and SBS Entities (*i.e.*, both bank and nonbank SBS Entities). Aside from comments on the specific requirements discussed below, the Commission did not receive comments on the applicability of paragraph

¹¹⁷ For example, the redundancy capabilities should consider taking into account fault tolerance. The National Institute of Standards and Technology defines “fault tolerance” as “[a] property of a system that allows proper operation even if components fail.” *See, e.g.*, Computer Security Resource Center, National Institute of Standards and Technology, U.S. Department of Commerce definition of “fault tolerance”. Available at https://csrc.nist.gov/glossary/term/fault_tolerance.

¹¹⁸ *See* Proposing Release, 86 FR at 68308.

¹¹⁹ *See* paragraph (f)(2)(v) of Rule 17a-4 and paragraph (e)(2)(v) of Rule 18a-6, as amended.

(f)(3) of Rule 17a-4 and paragraph (e)(3) of Rule 18a-6 to broker-dealers and SBS Entities.¹²⁰

For the reasons stated in the proposing release,¹²¹ the Commission is adopting the amendments regarding the applicability of the requirements, as proposed.¹²²

2. Facilities to Produce Records

Paragraph (f)(3)(i) of Rule 17a-4 requires a broker-dealer to at all times have available, for examination by Commission or SRO staff, facilities for the immediate, easily readable projection or production of micrographic media or electronic storage media images and for the production of easily readable images. Similarly, paragraph (e)(3)(i) of Rule 18a-6 requires an SBS Entity to at all times have available for examination by Commission staff facilities for the immediate, easily readable projection or production of records or images maintained on an electronic storage system and for the production of easily readable copies of those records or images.

The Commission proposed amending these paragraphs to make them more technology neutral.¹²³ Under the amendments, broker-dealers and SBS Entities would be required to have at all times available, for examination by the staffs of the Commission and other relevant securities regulators, facilities for immediate production of records preserved by means of the electronic recordkeeping system and for producing copies of those records.

One commenter stated that “this proposed rule is unclear, impractical, and inconsistent with general examination practices” and asked whether it requires broker-dealers to “have one or

¹²⁰ A commenter raised a concern that a proposed amendment to paragraph (e)(3) of Rule 18a-6 could be read to impose a technical requirement on electronic recordkeeping systems used by bank SBS Entities, which would be contrary to the Commission’s intent not to impose such requirements on these entities. *See* SIFMA Letter. The comment and the Commission’s response to the comment are discussed below in section II.E.4. of this release.

¹²¹ *See* Proposing Release, 86 FR at 68307-08.

¹²² *See* introductory text of paragraph (f)(3) of Rule 17a-4 and paragraph (e)(3) of Rule 18a-6, as amended.

¹²³ *See* Proposing Release, 86 FR at 68308. The proposed amendments to paragraph (f)(3)(i) of Rule 17a-4 would have deleted references to micrographic media and would have replaced terms that are related to the use of micrographic media. *Id.* The amendments as adopted transfer the current requirements for a broker-dealer electing to use a micrographic media system from paragraph (f)(3) of Rule 17a-4 to paragraph (f)(4) of that rule.

more computer workstations set aside for use by examiners” that are “able to access all electronic recordkeeping systems.”¹²⁴ The commenter further stated that the “requirement for the broker-dealer to *promptly* deliver requested records should be adequate to ensure that the DEA receives the required information and afford the broker-dealer with an opportunity to perform a privilege review before production.”¹²⁵ The commenter reiterated these comments with respect to the proposed requirements of paragraph (f)(3)(ii) of Rule 17a-4 and paragraph (e)(3)(ii) of Rule 18a-6 (discussed next) to the extent they required the broker-dealer or SBS Entity to be ready at all times to provide, and immediately provide, any *information needed to locate records* stored by means of the electronic recordkeeping system that the staffs of the Commission, SROs, and state securities regulators, as applicable, may request.¹²⁶

In proposing the amendments to paragraph (f)(3)(i) of Rule 17a-4 and paragraph (e)(3)(i) of Rule 18a-6, the Commission stated that the “objective is to set forth new requirements that would require broker-dealers and SBS Entities to have facilities available to produce records to the staffs of the Commission, SROs, and state securities regulators, as applicable, and to read records stored on an *electronic recordkeeping system*.”¹²⁷ The objective was not to alter how the Commission staff or other securities regulators conduct examinations. In the normal course, the facilities will typically be used by the broker-dealer or SBS Entity to produce the records and not by the examiners to review the records, so the use of the broker-dealer’s or SBS Entity’s facilities to review the records will not be necessary. However, there may be instances where the Commission staff or other securities regulators may need to use the facilities to access the records. For example, if the broker-dealer or SBS Entity fails financially and no longer has sufficient staff available to respond to requests to produce records, the Commission staff may

¹²⁴ NRS Letter.

¹²⁵ *Id.* (emphasis in original).

¹²⁶ See NRS Letter. See also sections II.E.3. and II.E.5. of this release (discussing the proposals regarding information necessary to locate records stored on an electronic recordkeeping system).

¹²⁷ Proposing Release, 86 FR 68308.

need to use the facilities to access the records or request an executive officer or third party to use the facilities to produce the records immediately to Commission staff or other securities regulators so that the examination or other use of the records by the Commission staff is not delayed.¹²⁸ Further, in order to access the records, the Commission staff will need the information necessary to locate the records.

For these reasons and the reasons stated in the proposing release,¹²⁹ the Commission is adopting the facilities requirements, substantially as proposed.¹³⁰

3. Ability to Provide Records Stored Electronically

Paragraph (f)(3)(ii) of Rule 17a-4 requires a broker-dealer to be ready at all times to provide, and immediately provide, any facsimile enlargement that the staff of the Commission, an SRO, or state securities regulator may request. Similarly, paragraph (e)(3)(ii) of Rule 18a-6 requires that an SBS Entity be ready at all times to immediately provide in a readable format any record or index stored on the electronic storage system that the staff of the Commission requests.

The Commission proposed amendments to both of these paragraphs to require the broker-dealer and the SBS Entity to be ready at all times to provide records stored on an electronic recordkeeping system and related information.¹³¹ In particular, the current text of both paragraphs would have been replaced with new text requiring that the broker-dealer or SBS Entity be ready at all times to provide, and immediately provide, any (1) *record* or (2) *information*

¹²⁸ As discussed in section II.E.6. of this release, broker-dealers and SBS Entities will need to designate an executive officer or third party to undertake, among other things, to furnish promptly to the Commission and other securities regulators information necessary to download copies of a record and its audit trail (if applicable) and to take reasonable steps to download the record and audit trail.

¹²⁹ See Proposing Release, 86 FR 68308.

¹³⁰ See paragraph (f)(3)(i) of Rule 17a-4 and paragraph (e)(3)(i) of Rule 18a-6, as amended. To improve the readability of paragraph (f)(3)(i) of Rule 17a-4 and paragraph (e)(3)(i) of Rule 18a-6, as amended, the Commission is replacing the phrase “facilities for immediate production of records preserved by means of the electronic recordkeeping system and for producing copies of those records” with the phrase “facilities for immediately producing the records preserved by means of the electronic recordkeeping system and for producing copies of those records”. As discussed in section II.E.5. of this release, the Commission also is adopting the requirement with respect to producing the information necessary to locate the records in other paragraphs of Rules 17a-4 and 18a-6.

¹³¹ See Proposing Release, 86 FR at 68308.

needed to locate records stored by means of the electronic recordkeeping system that the staffs of the Commission, SROs, and state securities regulators, as applicable, may request. One commenter that raised the concern that the facilities requirement discussed above would alter how the Commission and other securities regulators perform examinations reiterated that concern with this proposed requirement to the extent it required the production of *information needed to locate records*.¹³² The final amendments eliminate the *information needed to locate records* requirement from paragraph (f)(3)(ii) of Rule 17a-4 and paragraph (e)(3)(ii) of Rule 18a-6, as amended, because it is duplicative of a requirement in paragraph (f)(3)(iv) of Rule 17a-4 and paragraph (e)(3)(iv) of Rule 18a-6, as amended.¹³³ Consequently, the requirements of paragraph (f)(3)(ii) of Rule 17a-4 and paragraph (e)(3)(ii) of Rule 18a-6, as amended, are limited to addressing the production of a *record* and do not address the production of *information needed to locate a record*.

For these reasons and the reasons stated in the proposing release,¹³⁴ the Commission is adopting the requirement that broker-dealers and SBS Entities be ready to provide a record with the modification discussed above.¹³⁵

4. Accountability Regarding Inputting of Records

Paragraph (f)(3)(v) of Rule 17a-4 and paragraph (e)(3)(v) of Rule 18a-6 require broker-dealers and SBS Entities, respectively, to have in place an audit system providing for accountability regarding inputting of Broker-Dealer Regulatory Records or SBS Entity Regulatory Records to electronic storage media (in the case of Rule 17a-4(f)) and the electronic storage system (in the case of Rule 18a-6(e)) and inputting of any changes made to every original and duplicate record maintained and preserved thereby. The paragraphs further require that the

¹³² See NRS Letter. This comment is addressed in section II.E.2. of this release.

¹³³ As discussed in section II.E.5. of this release, the final amendments consolidate the requirements relating to information needed to access and locate records preserved by means of an electronic recordkeeping system in paragraph (f)(3)(iv) of Rule 17a-4 and paragraph (e)(3)(iv) of Rule 18a-6, as amended.

¹³⁴ See Proposing Release, 86 FR at 68308.

¹³⁵ See paragraph (f)(3)(i) of Rule 17a-4 and paragraph (e)(3)(i) of Rule 18a-6, as amended.

broker-dealer or SBS Entity must be able to have the results of such audit system available for examination by the staff of the Commission and that the audit results must be preserved for the time required for the audited records. The requirements of paragraph (f)(3)(v) of Rule 17a-4 were designed to address electronic recordkeeping systems that use technology that is WORM-compliant. The requirements of paragraph (e)(3)(v) of Rule 18a-6 were modelled closely on paragraph (f)(3)(v) of Rule 17a-4 even though Rule 18a-6(e) did not include the WORM requirement when it was adopted.¹³⁶

The Commission proposed to replace the existing requirements of paragraph (f)(3)(v) of Rule 17a-4 and paragraph (e)(3)(v) of Rule 18a-6 with a requirement that the broker-dealer or SBS Entity have in place an auditable system of controls that records, among other things: (1) each input, alteration, or deletion of a record; (2) the names of individuals inputting, altering, or deleting a record; and (3) the date and time such individuals input, altered, or deleted the record.¹³⁷ As used in the proposed text, the phrase “auditable system of controls” would have meant a system of controls that is documented and can be audited by internal or external examiners to determine whether the controls are operating as would be required by the rule.¹³⁸

Commenters expressed concern that the proposed amendments to paragraph (f)(3)(v) of Rule 17a-4 and paragraph (e)(3)(v) of Rule 18a-6 would be duplicative of the audit-trail requirement.¹³⁹ A commenter stated that the proposed new requirements would impose requirements “nearly identical” to the proposed new audit trail requirements of paragraph (f)(2)(i) of Rule 17a-4 and paragraph (e)(2)(i) of Rule 18a-6.¹⁴⁰ The commenter further stated that the requirements of paragraph (e)(3)(v) as of Rule 18a-6, as proposed to be amended, would “impose on bank SBS Entities many of the same technical requirements to maintain an audit trail

¹³⁶ See SBSD/MSBSP Recordkeeping Proposing Release, 79 FR at 25219; SBSD/MSBSP Recordkeeping Adopting Release, 84 FR at 68567-69.

¹³⁷ See Proposing Release, 86 FR at 68309.

¹³⁸ See *id.*

¹³⁹ See SIFMA Letter; RegEd Letter (expressing agreement with the SIFMA Letter).

¹⁴⁰ SIFMA Letter.

that [would] apply to non-bank SBS Entities under [Rule]18a-6(e)(2)” as proposed to be amended.¹⁴¹ The commenter therefore suggested that the requirements be “deleted” or, in the alternative, that bank SBS Entities be excluded from having to comply with them.¹⁴²

The Commission agrees that the audit-trail requirement, as proposed and adopted, will achieve the same results as the proposed amendments to paragraph (f)(3)(v) of Rule 17a-4 and paragraph (e)(3)(v) of Rule 18a-6. As discussed above, under the audit-trail requirement, a broker-dealer or nonbank SBS Entity must use an electronic recordkeeping system that preserves a record for the duration of its applicable retention period in a manner that maintains a complete time-stamped audit trail that includes: (1) all modifications to and deletions of the record or any part thereof; (2) the date and time of actions that create, modify, or delete the record; (3) if applicable, the identity of the individual creating, modifying, or deleting the record; and (4) any other information needed to maintain an audit trail of the record in a way that maintains security, signatures, and data to ensure the authenticity and reliability of the record and will permit re-creation of the original record if it is modified or deleted.¹⁴³ Consequently, the electronic recordkeeping system must generate the same type of information that paragraph (f)(3)(v) of Rule 17a-4 and paragraph (e)(3)(v) of Rule 18a-6, as proposed, would have required the broker-dealer or SBS Entity to generate separately from the electronic recordkeeping system.

However, as discussed above,¹⁴⁴ WORM-compliant electronic recordkeeping systems are not required to generate records of every iteration of every required record, and may in fact not be capable of generating every iteration. Consequently, the final amendments maintain the existing requirement on broker-dealers and nonbank SBS Entities with respect to their use of WORM-compliant recordkeeping systems by retaining the existing text of the rules, which – in the case of Rule 17a-4(f) – was adopted to address the use of WORM-compliant electronic

¹⁴¹ *Id.*

¹⁴² *See id.*

¹⁴³ *See* paragraph (f)(2)(i) of Rule 17a-4 and paragraph (e)(2)(i) of Rule 18a-6, as amended.

¹⁴⁴ *See* section II.D.2 of this release (discussing these amendments in more detail).

recordkeeping systems and has been a requirement since 1997.¹⁴⁵ Therefore, a broker-dealer or nonbank SBS Entity using a WORM-compliant electronic recordkeeping system will need to generate this information. The requirements do not apply with respect to an electronic recordkeeping system that complies with the audit-trail requirement. Nor do they apply to bank SBS Entities because they are not required to use a WORM-compliant electronic recordkeeping system (or an audit-trail compliant electronic recordkeeping system).¹⁴⁶

For these reasons, the Commission is not adopting the proposed amendments to paragraph (f)(3)(v) of Rule 17a-4 and paragraph (e)(3)(v) of Rule 18a-6 and, instead, is retaining the existing text of the rules with certain modifications.¹⁴⁷

5. Information to Access and Locate Records

As discussed above, paragraph (f)(3)(ii) of Rule 17a-4 and paragraph (e)(3)(ii) of Rule 18a-6, as proposed, would have required a broker-dealer or SBS Entity, respectively, to, among other things, be ready at all times to provide, and immediately provide, any (1) *record* and (2) *information needed to locate records* stored by means of the electronic recordkeeping system that the staffs of the Commission or other relevant securities regulators may request.¹⁴⁸ As

¹⁴⁵ See Rule 17a-4(f) Adopting Release, 62 FR 6496.

¹⁴⁶ See paragraph (f)(3)(iii) of Rule 17a-4 and paragraph (e)(3)(iii) of Rule 18a-6, as amended. As adopted, each paragraph contains an introductory clause stating that the requirements set forth in the paragraph apply to broker-dealers or SBS Entities operating pursuant to paragraph (f)(2)(i)(B) of Rule 17a-4 or paragraph (e)(2)(i)(B) of Rule 18a-6, respectively, which set forth the WORM alternative. As discussed in section II.E.1. of this release, bank SBS Entities are not subject to the requirements of paragraph (e)(2) of Rule 18a-6 and, therefore, will not be operating pursuant to paragraph (e)(2)(i)(B) of that rule.

¹⁴⁷ See paragraph (f)(3)(iii) of Rule 17a-4 and paragraph (e)(3)(iii) of Rule 18a-6, as amended. Under the final amendments, both paragraphs use the term “electronic recordkeeping system” rather than the existing terms “electronic storage media” in the case of Rule 17a-4(f) and “electronic storage system” in the case of Rule 17a-6(e). See section II.B. of this release (discussing the definition of “electronic recordkeeping system”). Finally, both paragraphs have been re-lettered from paragraphs (f)(3)(v) and (e)(3)(v) to paragraphs (f)(3)(iii) and (e)(3)(iii), respectively, because the requirements in paragraphs (f)(3)(iii) and (e)(3)(iii), as proposed, relating to a backup recordkeeping system were moved to paragraphs (f)(2) and (e)(2), respectively, and the requirements in paragraphs (f)(3)(iv) and (e)(3)(iv), as proposed, relating to information needed to locate electronic records were consolidated with the requirements in paragraphs (f)(3)(vi) and (e)(3)(vi), as proposed, respectively. See sections II.D.6. and II.D.5. of this release (discussing, respectively, the modifications to paragraph (f)(3)(iii) of Rule 17a-4 and paragraph (e)(3)(iii) of Rule 18a-6, as proposed, and paragraph (f)(3)(iv) of Rule 17a-4 and paragraph (e)(3)(iv) of Rule 18a-6, as proposed).

¹⁴⁸ See section II.E.3. of this release (discussing these amendments in more detail).

discussed above, paragraph (f)(3)(ii) of Rule 17a-4 and paragraph (e)(3)(ii) of Rule 18a-6, as amended, address the production of a *record* but not the production of *information needed to locate records*. Instead, as discussed below, the final amendments consolidate requirements that address information needed to locate records stored electronically into single paragraphs in Rules 17a-4 and 18a-6.

Paragraph (f)(3)(iv) of Rule 17a-4 establishes a series of obligations relating to the indexing of Broker-Dealer Regulatory Records. Paragraph (e)(3)(iv) of Rule 18a-6 establishes similar requirements relating to the indexing of SBS Entity Regulatory Records. The Commission proposed to amend these paragraphs to impose obligations on broker-dealers and SBS Entities to organize and maintain information necessary to locate records stored on their electronic recordkeeping systems without mandating the use of indexes.¹⁴⁹ Under the amendments, a broker-dealer or SBS Entity using an electronic recordkeeping system would have been required to organize and maintain information necessary to locate records maintained by the electronic recordkeeping system.¹⁵⁰ A commenter stated that this proposal was “clear and appropriate and will provide broker-dealers the flexibility to implement any method of cataloguing their records.”¹⁵¹

Paragraph (f)(3)(vi) of Rule 17a-4 and paragraph (e)(3)(vi) of Rule 18a-6 require a broker-dealer and an SBS Entity, respectively, to maintain, keep current, and provide promptly upon request by the staffs of the Commission or an SRO, if applicable, all information necessary to access records and indexes stored on the electronic storage media; or place in escrow and keep current a copy of the physical and logical file format of the electronic storage media, the field format of all different information types written on the electronic storage media and the source code, together with the appropriate documentation and information necessary to access records

¹⁴⁹ See Proposing Release, 86 FR at 68309.

¹⁵⁰ See Proposing Release, 86 FR at 68309, note 75.

¹⁵¹ NRS Letter.

and indexes. The Commission proposed to eliminate the escrow account option from these paragraphs.¹⁵² The Commission proposed to retain the requirement that the broker-dealer or SBS Entity maintain, keep current, and provide promptly upon request by the Commission, SROs, and state securities regulators, as applicable, all information necessary to access and locate records preserved by means of the electronic recordkeeping system. No comments were received on these proposed amendments.

To improve the clarity of the rules and eliminate potentially redundant requirements, the final amendments consolidate the proposed requirements discussed above in a single paragraph. Under the amendments, a broker-dealer and SBS Entity must organize, maintain, keep current, and provide promptly upon request by the staffs of the Commission or other relevant securities regulators all information necessary to access and locate records preserved by means of the electronic recordkeeping system.¹⁵³

As discussed above, a commenter raised a concern that requiring broker-dealers to produce *information needed to locate records* to the Commission staff and other securities regulators could alter the existing examination process.¹⁵⁴ The final amendments, which, as explained above, do not directly alter the examination process and are not designed to otherwise change the examination process, retain the production requirement relating to providing *information needed to locate* electronic records for reasons discussed above.¹⁵⁵ As described in the proposing release, the more general reference to “information needed to locate the electronic record” is designed to incorporate whatever means a particular electronic recordkeeping system uses to organize the records and locate a specific record (*e.g.*, indexes or data fields).¹⁵⁶ For these

¹⁵² See Proposing Release, 86 FR at 68309.

¹⁵³ See paragraph (f)(3)(iv) of Rule 17a-4 and paragraph (e)(3)(iv) of Rule 18a-6, as amended.

¹⁵⁴ See NRS Letter.

¹⁵⁵ See section II.E.2. of this release (discussing the comment and the Commission’s response to the comment).

¹⁵⁶ See Proposing Release, 86 FR at 68307.

reasons, the Commission is adopting the proposed requirements with respect to the information necessary to locate electronic records with modifications discussed above.¹⁵⁷

6. Designated Executive Officer or Third Party

Paragraph (f)(3)(vii) of Rule 17a-4 provides that, for a broker-dealer exclusively using electronic storage media for some or all of its record preservation, at least one third party, who has access to and the ability to download information from the broker-dealer's electronic storage media to any acceptable medium under Rule 17a-4, must file with the DEA for the broker-dealer certain undertakings. The required text of the undertakings are set forth in the rule. They require the third party to undertake: (1) to furnish promptly to the Commission, the broker-dealer's SRO(s), and state securities regulators having jurisdiction over the broker-dealer (collectively, the "securities regulators"), upon reasonable request, such information as is deemed necessary by the securities regulators to download information kept on the broker-dealer's electronic storage media to any medium acceptable under Rule 17a-4; and (2) to take reasonable steps to provide access to information contained on the broker-dealer's electronic storage media, including, as appropriate, arrangements for the downloading of any record required to be maintained and preserved by the broker-dealer pursuant to Rules 17a-3 and 17a-4 in a format acceptable to the securities regulators. The rule further provides that these arrangements must provide specifically that in the event of a failure on the part of a broker-dealer to download the record into a readable format and after reasonable notice to the broker-dealer, upon being provided with the appropriate electronic storage medium, the third party will undertake to do so, as the securities regulators may request.

The Commission proposed to amend paragraph (f)(3)(vii) of Rule 17a-4 to replace the third-party undertakings requirement with a senior officer undertakings requirement.¹⁵⁸ In proposing this modification, the Commission noted that commenters stated during the rulemaking for Rule 18a-6(e) that the requirement "was outdated in light of the changed

¹⁵⁷ See paragraph (f)(3)(iv) of Rule 17a-4 and paragraph (e)(3)(iv) of Rule 18a-6, as amended.

¹⁵⁸ See Proposing Release, 86 FR at 68310-11.

technological environment” and that providing a third party access to electronic recordkeeping systems and client information “needlessly exposes firms to data leakage and cybersecurity threats.”¹⁵⁹ The proposed amendments to paragraph (f)(3)(vii) of Rule 17a-4 also would have modified the second undertaking so that it would have been triggered if the broker-dealer failed to provide records and, if applicable, associated audit trails stored on the electronic recordkeeping system.¹⁶⁰ Rule 18a-6(e) did not include the third-party undertakings requirement. The proposed amendments to Rule 18a-6(e) would have added the senior officer undertakings requirement to the rule.¹⁶¹ However, the undertakings would have been required to be filed with the Commission (rather than a DEA) because SBS Entities do not have a DEA.

One commenter expressed general support for the proposal.¹⁶² Four commenters suggested clarifying the proposal to specify that broker-dealers and SBS Entities should be allowed to designate more than one senior officer to complete the proposed undertakings.¹⁶³ One of these commenters stated that doing so would “provid[e] leeway to firms to account for personnel location changes, vacation scheduling, remote working and succession planning.”¹⁶⁴ Two commenters noted that the term “senior officer” could be confusing, as the term is used in other regulatory contexts.¹⁶⁵ One of these commenters suggested using the term “designated officers,”¹⁶⁶ while the other suggested “designated head or heads.”¹⁶⁷

¹⁵⁹ Proposing Release, 86 FR at 68310. *See also* SBSD/MSBSP Recordkeeping Adopting Release, 84 FR at 68569.

¹⁶⁰ *See* Proposing Release, 86 FR at 68311. The Commission proposed a number of additional amendments to the form of the undertakings to improve their readability and conform them to other proposed amendments (e.g., using the term “electronic recordkeeping system” instead of the term “electronic storage media” and requirements to produce a record and its audit trail in a human readable format or a reasonably usable electronic format). *See* Proposing Release, 86 FR at 68310, note 86.

¹⁶¹ *See* Proposing Release, 86 FR at 68311.

¹⁶² *See* letter from Robert Laorno, General Counsel, ICE Bonds Securities Corporation, Dec. 14, 2021 (“ICE Bonds Letter”).

¹⁶³ *See* Fidelity Letter; NRS Letter; RegEd Letter; SIFMA Letter.

¹⁶⁴ Fidelity Letter.

¹⁶⁵ *See* Fidelity Letter; SIFMA Letter.

¹⁶⁶ SIFMA Letter.

¹⁶⁷ Fidelity Letter.

Commenters also suggested modifying the proposed senior officer undertakings requirements to explicitly allow for the designation or delegation of responsibility.¹⁶⁸ Two of these commenters expressed concern that the language as proposed would require technical expertise not usually expected in a senior officer position.¹⁶⁹ One of these commenters stated that the proposed language “implies that the [designated] individual or individuals will have every password as well as personal knowledge of every repository that may hold records of the Regulated Entity” and that this would be “an unrealistic expectation of a senior person in a large organization.”¹⁷⁰

Commenters expressed concerns with replacing the third-party undertakings requirement with the senior officer undertakings requirement.¹⁷¹ One of these commenters stated that “the designated third party is a critical component of Rule 17a-4 which helps to ensure timely access to records if requested by a regulator” and that the requirement “creates a clear incentive for full cooperation from broker-dealers at the outset by providing an alternative and independent means to access records if the broker-dealer fails to do so.”¹⁷² A second commenter stated that the “real value [of designated third-party use] for clients is in our regular meetings in which the client’s compliance and [information technology] IT teams are brought together to discuss and ensure,” among other things, that the client understands “how electronic compliance records are retained internally including access, Rule 17a-4(f) requirements, disposition, and a review of legal holds,” and that it “follow[s] industry ‘best practices’ as to collection and capture of metadata.”¹⁷³ This commenter further stated that “an independent 3rd party working together with both IT and compliance teams provides a valuable service to financial institutions and their respective

¹⁶⁸ See American Funds Distributors Letter; ICE Bonds Letter; SIFMA Letter.

¹⁶⁹ See American Funds Distributors Letter; SIFMA Letter.

¹⁷⁰ SIFMA Letter.

¹⁷¹ See letter from Douglas Weeden, Managing Director, 17a-4, LLC, Jan, 3, 2022 (“17a-4, LLC Letter”); NCC Group Letter; RegEd Letter.

¹⁷² NCC Group Letter.

¹⁷³ 17a-4, LLC Letter.

DEAs.” A third commenter stated that “the Commission should consider providing firms with the option to either have a senior officer sign an undertaking or provide an undertaking by a third party, if that third party will also be maintaining those records on behalf of the firm.”¹⁷⁴

In response to the comments, the final amendments to Rules 17a-4(f) and 18a-6(e) require a broker-dealer or SBS Entity to designate either an executive officer of the firm (“Designated Executive Officer”) or an unaffiliated third-party (“Designated Third Party”) to make the required undertakings. For example, some firms may choose the Designated Executive Officer option for cyber-security reasons because these firms prefer to make this an internal function. Other firms may elect the Designated Third-Party Option because they prefer to outsource this function. Firms may elect to outsource this function because they are comfortable with how the Designated Third-Party manages cybersecurity risk and because they may use that entity for other record custodial services.

The Designated Executive Officer replaces the role of the “senior officer,” an undefined term introduced in the proposed rule amendments. The Designated Executive Officer must be a member of senior management of the broker-dealer or SBS Entity who has access to and the ability to provide the records of the firm maintained and preserved on the firm’s electronic recordkeeping system. Further, the Designated Executive Officer can appoint in writing up to two employees and three specialists to assist the Designated Executive Officer in fulfilling the officer’s obligations set forth in the undertakings.

Therefore, under the final amendments a broker-dealer or SBS Entity has the option to designate an executive officer to make the required undertakings in lieu of designating a third party.¹⁷⁵ A Designated Executive Officer must be a member of senior management of the broker-dealer or SBS Entity who has access to and the ability to provide records maintained and preserved on the electronic recordkeeping system either directly or through a designated

¹⁷⁴ RegEd Letter.

¹⁷⁵ See paragraph (f)(3)(v)(A) of Rule 17a-4 and paragraph (e)(3)(v)(A) of Rule 18a-6, as amended.

specialist who reports directly or indirectly to the Designated Executive Officer.¹⁷⁶ As proposed, the amendments would have required the senior officer to have independent access to the records.¹⁷⁷ The Commission explained that “[i]ndependent access would mean the senior officer has the knowledge, credentials, and information necessary to access and provide the records without having to rely on other individuals at the firm.” A Designated Executive Officer under the final amendments, however, must have access and the ability to provide the records either *directly or through a designated specialist* who reports directly or indirectly to the officer. The final amendments permit the Designated Executive Officer to appoint in writing up to three designated specialists.¹⁷⁸ A designated specialist must be an employee of the broker-dealer or SBS Entity *who has access to and the ability to provide records* maintained and preserved on the electronic recordkeeping system.¹⁷⁹ Consequently, under the final amendments, the Designated Executive Officer either must have the knowledge, credentials, and information necessary to access and provide the records without having to rely on other individuals at the firm or have appointed in writing up to three designated specialists who have such knowledge, credentials, and information and that are direct or indirect reports to the officer. In this way, the Designated Executive Officer’s access can be achieved through the officer’s ability to direct a designated specialist to access and provide the records.

Under the final amendments, the Designated Executive Officer also can appoint in writing up to two *designated officers* who will take the steps necessary to fulfill the obligations of the Designated Executive Officer set forth in the undertakings in the event the Designated Executive Officer is unable to fulfill those obligations.¹⁸⁰ A designated officer must be an

¹⁷⁶ See paragraph (f)(1)(iii) of Rule 17a-4 and paragraph (e)(1)(ii) of Rule 18a-6, as amended (defining the term “designated executive officer”).

¹⁷⁷ See Proposing Release, 86 FR at 68311.

¹⁷⁸ See paragraph (f)(3)(v)(B)(2) of Rule 17a-4 and paragraph (e)(3)(v)(B)(2) of Rule 18a-6, as amended.

¹⁷⁹ See paragraph (f)(1)(v) of Rule 17a-4 and paragraph (e)(1)(iv) of Rule 18a-6, as amended (defining the term “designated specialist”).

¹⁸⁰ See paragraph (f)(3)(v)(B)(1) of Rule 17a-4 and paragraph (e)(3)(v)(B)(1) of Rule 18a-6, as amended.

employee of the broker-dealer or SBS Entity who reports directly or indirectly to the Designated Executive Officer and who has access to and the ability to provide records maintained and preserved on the electronic recordkeeping system either directly or through a designated specialist who reports directly or indirectly to the designated officer.¹⁸¹ As is required of the Designated Executive Officer, the designated officer either must have the knowledge, credentials, and information necessary to access and provide the records without having to rely on other individuals at the firm or be able to direct a designated specialist who has such knowledge, credentials, and information.

The final amendments provide that the Designated Executive Officer's appointment of, or reliance on, a designated officer or designated specialist does not relieve the Designated Executive Officer of the obligations set forth in the undertakings.¹⁸² The Designated Executive Officer is at all times responsible for fulfilling the obligations set forth in the undertakings either directly or through a designated officer or specialist regardless of any actions taken by a designated officer or designated specialist in response to a request of the Commission or other relevant securities regulator that the Designated Executive Officer fulfill an obligation set forth in the undertakings. In response to the comment that it would be "an unrealistic expectation of a senior person in a large organization" to "have every password as well as personal knowledge of every repository that may hold records of the Regulated Entity,"¹⁸³ the Commission believes that the Designated Executive Officer of a broker-dealer or SBS Entity should have information about every repository that the firm may employ for the purpose of holding the firm's records pursuant to the requirements of Rule 17a-4(f) or 18a-6(e). Otherwise, this individual may not be able to fulfill directly or indirectly the obligations in the undertaking with respect to the records stored at those repositories. This does not mean the Designated Executive Officer must

¹⁸¹ See paragraph (f)(1)(iv) of Rule 17a-4 and paragraph (e)(1)(iii) of Rule 18a-6, as amended (defining "designated officer").

¹⁸² See paragraph (f)(3)(v)(C) of Rule 17a-4 and paragraph (e)(3)(v)(C) of Rule 18a-6, as amended.

¹⁸³ SIFMA Letter.

personally have this information at hand at all times. The firm should have documentation identifying the locations where its records are stored in order to meet its regulatory obligations with respect to the records.¹⁸⁴ The Designated Executive Officer can rely on that documentation. In addition, under the final rule, the Designated Executive Officer can rely on a designated officer or designated specialist to provide details such as passwords necessary to access the records.

Under the final amendments, a broker-dealer or SBS Entity has the option to designate a third party (“Designated Third Party”) to make the required undertakings in lieu of designating an executive officer.¹⁸⁵ Thus, broker-dealers can continue to use a third party to meet the requirement. However, because the final amendments modify the form of the undertakings, broker-dealers that elect to use the Designated Third Party option will need to file updated undertakings with their DEAs.

For these reasons and the reasons stated in the proposing release, the Commission is adopting the undertakings requirements with the modifications discussed above.¹⁸⁶

Finally, the Commission received several comments regarding the potential process of transitioning from the current rules to the rules as proposed, were they to be adopted.¹⁸⁷ Two commenters stated that the proposing release was unclear on how firms should transition from their current WORM-based electronic recordkeeping systems, stating that the removal of the requirement for a third-party undertaking could result in “challenges” arising from the process of

¹⁸⁴ To the extent this information is recorded in a memorandum or an agreement, the broker-dealer or nonbank SBS Entity would need to preserve the documentation pursuant to the requirements of paragraph (b)(4) or (7) of Rule 17a-4 or paragraph (b)(1)(iv) or (vii) of Rule 18a-6, respectively.

¹⁸⁵ See paragraph (f)(3)(v)(A) of Rule 17a-4 and paragraph (e)(3)(v)(A) of Rule 18a-6, as amended. To distinguish the Designated Third Party from the Designated Executive Officer, the final amendments define a “designated third party” as “a person that is not affiliated with the broker-dealer or SBS Entity who has access to and the ability to provide records maintained and preserved on the electronic recordkeeping system.” See paragraph (f)(1)(vi) of Rule 17a-4 and paragraph (e)(1)(v) of Rule 18a-6, as amended. This definition is consistent with the requirements for a third party prior to the amendments and, therefore, entities that are serving as Designated Third Parties prior to the amendments should be able to continue doing so.

¹⁸⁶ See paragraph (f)(3)(v) of Rule 17a-4 and paragraph (e)(3)(v) of Rule 18a-6, as amended.

¹⁸⁷ See Committee of Annuity Issuers Letter; FSI Letter; SIFMA Letter.

terminating a third-party relationship with a WORM recordkeeping provider. These two commenters also requested “guidance and clarification” as to whether a broker-dealer would be required to rescind or withdraw its prior undertakings, notices, or WORM representations or whether a broker-dealer would need to notify the Commission before transitioning to another compliant alternative.¹⁸⁸

As discussed above, broker-dealers will need to file new undertakings with their DEAs as a result of the final amendments regardless of whether they switch to using a Designated Executive Officer, switch to using a different Designated Third Party, or continue to use their existing Designated Third Party. Similarly, under Rule 17a-4(i) prior to these amendments, broker-dealers needed to file new undertakings if they switched to using a different Designated Third Party. In filing the new undertakings, broker-dealers may indicate that they are replacing the previously filed undertakings. Further, in response to the request for clarification, the broker-dealer need not notify the Commission that it is switching from a WORM-compliant electronic recordkeeping system to an audit trail-compliant electronic recordkeeping service.

F. Requirements for Broker-Dealers Using Micrographic Media to Preserve Records

Rule 17a-4(f) permits broker-dealers to maintain and preserve Broker-Dealer Regulatory Records on micrographic media. The rule defines the term *micrographic media* as microfilm or microfiche, or any similar medium.¹⁸⁹ The current requirements for broker-dealers using micrographic media are set forth in paragraphs (f)(3)(i) through (iv) of Rule 17a-4, which also set forth requirements for broker-dealers using electronic storage media. The Commission proposed to move these requirements to new paragraph (f)(4) of Rule 17a-4.¹⁹⁰ One commenter expressed support for retaining the micrographic media provisions in Rule 17a-4.¹⁹¹

¹⁸⁸ See Committee of Annuity Issuers Letter; FSI Letter.

¹⁸⁹ See paragraph (f)(1)(i) of Rule 17a-4.

¹⁹⁰ See Proposing Release, 86 FR at 68311.

¹⁹¹ See NRS Letter.

For the reasons stated in the proposing release,¹⁹² the Commission is adopting the micrographic media amendments as proposed.¹⁹³

G. Requirements for Certain Third Parties that Maintain Broker-Dealer or SBS Entity Regulatory Records

Paragraph (i) of Rule 17a-4 (“Rule 17a-4(i)”) and paragraph (f) of Rule 18a-6 (“Rule 18a-6(f)”) require a *third party* who prepares or maintains Broker-Dealer Regulatory Records or SBS Regulatory Records (regardless of whether the records are in paper or electronic form) to file a written undertaking with the Commission signed by a duly authorized person (“Traditional Undertaking”).¹⁹⁴ The Traditional Undertaking must include a provision whereby the third party agrees, among other things, to permit examination of the records by representatives or designees of the Commission as well as to promptly furnish to the Commission or its designee true, correct, complete, and current hard copies of any or all or any part of such books and records. The rules further provide that an agreement with the third party will not relieve the broker-dealer or SBS Entity from the responsibility to prepare and maintain the Broker-Dealer Regulatory Records or the SBS Regulatory Records, respectively.¹⁹⁵

Commenters stated that cloud service providers do not have the ability to make the Traditional Undertaking required by Rules 17a-4(i) and 18a-6(f).¹⁹⁶ One commenter stated that “[s]ince cloud storage is similar to storing the records in-house with respect to who can access the records, it is generally not possible for a third-party provider to produce any records in an

¹⁹² See Proposing Release, 86 FR at 68311.

¹⁹³ See paragraph (f)(4) of Rule 17a-4, as amended.

¹⁹⁴ Rule 17a-4(i) currently uses the term “outside entity” whereas paragraph (f)(1) of Rule 18a-6 currently uses the term “third party.” Consequently, the amendments to paragraph (i) of Rule 17a-4 discussed below permitting the Alternative Undertaking also use the term “outside entity” to be consistent with the existing text of the rule. See paragraph (i)(1)(ii) of Rule 17a-4, as amended. The term “outside entity” has the same meaning as the term “third party.” In both cases, the terms mean a person other than the broker-dealer or SBS Entity. For the purposes of the discussion of the amendments permitting the Alternative Undertaking in this release, the Commission is using the term “third party.”

¹⁹⁵ See paragraph (i)(2) of Rule 17a-4 and paragraph (f)(2) of Rule 18a-6. As noted above, paragraph (f)(1) of Rule 18a-6(f) currently uses the term “third party.” However, paragraph (f)(2) uses the term “outside entity.” To be consistent, the Commission is amending paragraph (f)(2) of Rule 18a-6 to replace the term “outside entity” with the term “third party.” See paragraph (f)(2) of Rule 18a-6, as amended.

¹⁹⁶ See AWS Letter; Committee of Annuity Insurers Letter; Fidelity Letter; FSI Letter; SIFMA Letter.

electronic format (much less a “hard copy”) given that such files are often encrypted and accessible only by the Regulated Entity.”¹⁹⁷ Another commenter stated, “[i]mportantly, unlike Regulated Entities using the types of service providers specified in Rule 17a-4(i) (*i.e.*, outside service bureau, depository, or bank), customers using cloud services maintain ownership and control of their content, including control over...who has access to their accounts and content, and how those access rights are granted, managed, and revoked.”¹⁹⁸ A third commenter stated that “many broker-dealers struggle to find outside recordkeeping vendors willing to provide the Traditional Undertaking and that “many cloud service providers...do not have the ability to make the [Traditional Undertaking], as these files are typically encrypted and only accessible by the broker-dealer firm using the cloud storage services.” This commenter further stated that “given the inability for cloud providers to make (or, in some cases, their refusal to assume liability for making) the [Traditional Undertaking], the SEC should consider relaxing or eliminating this undertaking entirely.”¹⁹⁹ An additional commenter stated that “[w]hile Rule 17a-4(i) was likely written with hardcopy (paper) records in mind, it does not specifically mention paper or any other medium.” This commenter added that “[a]s the brokerage industry (along with its self-regulatory organization, the Financial Industry Regulatory Authority (FINRA)) moves away from maintaining paper records, and is increasingly employing cloud based solutions, this undertaking is now outdated and does not represent current recordkeeping approaches and configurations.”²⁰⁰

The commenters have pointed out a significant difference in how traditional records custodians maintain records for their clients compared to how cloud service providers maintain records for their clients. Namely, traditional records custodians control access to the records whereas cloud service providers give their clients the ability to remotely access the records and

¹⁹⁷ SIFMA Letter.

¹⁹⁸ AWS Letter (emphasis in original).

¹⁹⁹ Committee of Annuity Insurers Letter.

²⁰⁰ Fidelity Letter.

to encrypt the records. Nonetheless, if a broker-dealer or SBS Entity uses a cloud service provider to maintain Broker-Dealer Regulatory Records or SBS Entity Regulatory Records, the current requirements of Rules 17a-4(i) and 18a-6(f), respectively, are implicated because a third party (rather than the broker-dealer or SBS Entity) is holding the records. Moreover, while the broker-dealer or SBS Entity may be able to access the records remotely, the cloud service provider can block that access. In this way, the cloud service provider can control access to the records. Therefore, under the existing requirements of Rules 17a-4(i) and 18a-6(f), the broker-dealer or SBS Entity must have the cloud service provider execute the Traditional Undertaking.

However, the requirements of Rule 17a-4(i) pre-date the use of cloud service providers by broker-dealers. Moreover, Rule 18a-6(f) was modelled on Rule 17a-4(i) and, therefore, similarly was not designed to address the use of cloud service providers by SBS Entities.²⁰¹ One of the goals of this rulemaking is to make Rules 17a-4 and 18a-6 more technology neutral.²⁰² The objective is to prescribe rules that remain workable as record maintenance and preservation technologies evolve over time but also to set forth requirements designed to ensure that broker-dealers and SBS Entities maintain and preserve records in a manner that promotes their integrity, authenticity, and accessibility. In light of the comments and the emerging use of cloud service providers by broker-dealers and SBS Entities, the Commission is adopting amendments to Rules 17a-4(i) and 18a-6(f).²⁰³ The amendments permit a cloud service provider to make an alternative

²⁰¹ See SBSD/MSBSP Recordkeeping Proposing Release, 79 FR at 25219-20; SBSD/MSBSP Recordkeeping Adopting Release, 84 FR at 68569-70.

²⁰² See Proposing Release, 86 FR at 68301.

²⁰³ See paragraph (i)(1)(ii) of Rule 17a-4 and paragraph (f)(1)(ii) of Rule 18a-6, as amended. Because the amendments are set forth in new paragraph (i)(1)(ii) of Rule 17a-4 and paragraph (f)(1)(ii) of Rule 18a-6, current paragraph (i)(1) of Rule 17a-4 and paragraph (f)(1) of Rule 18a-6 are being re-lettered paragraphs (i)(1)(i) and (f)(1)(i), respectively. In light of these amendments, the Commission is amending the existing requirements of current paragraph (i)(1) of Rule 17a-4 and paragraph (f)(1) of Rule 18a-6 to add text explicitly identifying entities that provide cloud services as third-party record custodians under Rules 17a-4(i) and 18a-4(f) (in particular, the amendments add the phrase “, including a recordkeeping service that owns and operates the servers or other storage devices on which the records are preserved or maintained,” after the phrase “or other recordkeeping service” in Rule 17a-4(i) and the phrase “, including by a third party that owns and operates the servers or other storage devices on which the records are preserved or maintained,” after the phrase “or maintained by a third party” in Rule 18a-4(f). See paragraph (i)(1)(i) of Rule 17a-4 and paragraph (f)(1)(i) of Rule 18a-6, respectively, as amended.

undertaking that is tailored to how cloud service providers maintain records for broker-dealers and SBS Entities (“Alternative Undertaking”) in lieu of the Traditional Undertaking. At the same time, the amendments are designed to ensure that the records are accessible and can be examined by the representatives and designees of the Commission and produced by the broker-dealer or SBS Entity to the representatives and designees of the Commission.

Under the amendments, a third party may file the Alternative Undertaking (the format of which is discussed below) in lieu of the Traditional Undertaking if the Broker-Dealer Regulatory Records or SBS Regulatory Records are maintained and preserved by means of an *electronic recordkeeping system as defined in Rules 17a-4(f) and 18a-6(e)*, respectively, utilizing servers or other storage devices that are owned or operated by a third party (including an affiliate of the broker-dealer or SBS Entity)²⁰⁴ and the broker-dealer or SBS Entity has independent access to the records.²⁰⁵ Thus, the ability to provide the Alternative Undertaking does not apply when the third party maintains Broker-Dealer Regulatory Records or SBS Regulatory Records in paper format or on micrographic media. This limitation is based on the fact that some electronic records held by a third party can nonetheless be accessed remotely (*e.g.*, from the premises of the broker-dealer or SBS Entity) and downloaded to a local server (*e.g.*, one owned and operated by the broker-dealer or SBS Entity). Records stored in paper form or on micrographic media cannot be accessed remotely – one must travel to the site where the records are held to access or retrieve them. Therefore, accessing the records requires the cooperation of the third party to either permit a representative or designee of the Commission to enter the site where the records are stored to examine them or to produce a hard copy of the records to the representative or designee. For these reasons, third parties that hold Broker-Dealer Regulatory Records or SBS Entity Regulatory Records in paper format or on micrographic media will continue to be required

²⁰⁴ The Commission has included this clarification in the rule text to ensure that the requirements of the Alternative Undertaking apply to every broker-dealer or SBS Entity that uses a third-party provider, regardless of whether or not that third-party provider is affiliated with the broker-dealer or SBS Entity.

²⁰⁵ See paragraph (i)(1)(ii)(A) of Rule 17a-4 and paragraph (f)(1)(ii)(A) of Rule 18a-6, as amended.

to provide the Traditional Undertaking set forth in amended paragraph (i)(1)(i) of Rule 17a-4 or paragraph (f)(1)(i) of Rule 18a-6, respectively. As discussed above, the Traditional Undertaking must include a provision whereby the third party agrees, among other things, to permit examination of the records by representatives or designees of the Commission as well as to promptly furnish to the Commission or its designee true, correct, complete, and current hard copies of any or all or any part of such books and records.

As indicated above, a second condition to utilizing the Alternative Undertaking is that the broker-dealer or SBS Entity must have *independent access* to the records held by the third party. The fact that the records are held by the third party in *electronic form* alone is not enough to utilize the Alternative Undertaking. The final amendments define “independent access” to mean that the broker-dealer or SBS Entity can regularly access the records without the need of any intervention by the third party and through such access unilaterally take actions with the respect to the records held by the third party that are contemplated by the Traditional Undertaking. Specifically, the broker-dealer or SBS Entity must be able to permit examination of the books and records at any time or from time to time during business hours by representatives or designees of the Commission,²⁰⁶ and to promptly furnish to the Commission or its designee a true, correct, complete and current hard copy of any or all or any part of such records.²⁰⁷

Thus, the definition of *independent access* is designed to ensure that the broker-dealer or SBS Entity can unilaterally provide the same access to the records as agreed to by a third party executing the Traditional Undertaking. This means that the broker-dealer or SBS Entity must be

²⁰⁶ See paragraph (i)(1)(ii)(B)(1) of Rule 17a-4 and paragraph (f)(1)(ii)(B)(1) of Rule 18a-6, as amended. See also paragraph (i)(1)(i) of Rule 17a-4 and paragraph (f)(1)(i) of Rule 18a-6, as amended (setting forth the Traditional Undertaking requirement, which provides, in pertinent part, that the third party must undertake to permit examination of such books and records at any time or from time to time during business hours by representatives or designees of the Commission).

²⁰⁷ See paragraph (i)(1)(ii)(B)(2) of Rule 17a-4 and paragraph (f)(1)(ii)(B)(2) of Rule 18a-6, as amended. See also paragraph (i)(1)(i) of Rule 17a-4 and paragraph (f)(1)(i) of Rule 18a-6, as amended (setting forth the Traditional Undertaking requirement, which provides, in pertinent part, that the third party must undertake to promptly furnish to the Commission or its designee a true, correct, complete and current hard copy of any or all or any part of such records).

able to make the records available for examination and to produce hard copies of the records by accessing them remotely without the need of any intervention by the third party that holds the records. In effect, the broker-dealer must have the same access to the records and capability to produce the records that would be the case if the broker-dealer or SBS Entity held the records itself and not at a third party. With this level of access, the Traditional Undertaking is not necessary because Commission representatives and designees can access the records through the broker-dealer or SBS Entity without the need for the third party to take any intervening steps.

If the conditions set forth under paragraphs (i)(1)(ii)(A) and (B) of Rule 17a-4 and paragraphs (f)(1)(ii)(A) and (B) of Rule 18a-6, as amended are met, the broker-dealer is permitted to have the third party execute the Alternative Undertaking in lieu of the Traditional Undertaking. The format of the Alternative Undertaking is designed to account for how cloud service providers maintain records for broker-dealers and SBS Entities but also to promote the accessibility of those records to the Commission and other securities regulators and, in the case of broker-dealers, to a trustee appointed under SIPA. First, in the Alternative Undertaking, the third party must acknowledge that the records are the property of the broker-dealer or SBS Entity.²⁰⁸ The Traditional Undertaking has a similar requirement to acknowledge the records are the property of the broker-dealer or SBS Entity.²⁰⁹

Second, the third party must acknowledge in the Alternative Undertaking that the broker-dealer or SBS Entity has made three representations to the third party.²¹⁰ The broker-dealer or SBS Entity could, for example, make these representations in the service contract with the third party or an addendum to an existing service contract. The first representation is that broker-dealer or SBS Entity is subject to Commission rules governing the maintenance and preservation of certain records. This representation, and the third party's acknowledgement of it, are designed

²⁰⁸ See paragraph (i)(1)(ii)(A) of Rule 17a-4 and paragraph (f)(1)(ii)(A) of Rule 18a-6, as amended.

²⁰⁹ See paragraph (i)(1)(i) of Rule 17a-4 and paragraph (f)(1)(i) of Rule 18a-6, as amended.

²¹⁰ See paragraph (i)(1)(ii)(A) of Rule 17a-4 and paragraph (f)(1)(ii)(A) of Rule 18a-6, as amended.

to alert the third party that certain of the records held by the third party for the broker-dealer or SBS Entity are subject to Federal securities laws administered by the Commission and, therefore, to inform the third party of the necessity and importance of maintaining the records in compliance with those laws.

The second representation is that the broker-dealer or the SBS Entity has *independent access* to the records maintained by the third party.²¹¹ As discussed above, the final amendments define the term “independent access” and the broker-dealer or SBS Entity must have independent access to the records in order to use the Alternative Undertaking. It is the responsibility of the broker-dealer or SBS Entity (not the third party) to ensure that its access to the records maintained by the third party meets the definition of “independent access” under the final amendments. This representation, and the third party’s acknowledgement of it, are designed to delineate the obligations of the broker-dealer or SBS Entity and the third party; namely, that it is the responsibility of the broker-dealer or SBS Entity to make the records held by the third party available for examination or to produce hard copies of the records (and not the responsibility of the third party).

The third representation is that the broker-dealer or SBS Entity consents to the third party fulfilling the obligations set forth in the Alternative Undertaking.²¹² As discussed in the next paragraph, the third party will need to agree to take or refrain from taking certain actions in the Alternative Undertaking with respect to the records it maintains for the broker-dealer or SBS Entity. This representation, and the third party’s acknowledgement of it, are designed to ensure that the third party can fulfill these obligations under its arrangement with the broker-dealer or the SBS Entity.

In addition to the acknowledgements, the third party must undertake to facilitate within its ability, and not impede or prevent, the examination, access, download, or transfer of the

²¹¹ See paragraph (i)(1)(ii)(A) of Rule 17a-4 and paragraph (f)(1)(ii)(A) of Rule 18a-6, as amended.

²¹² See paragraph (i)(1)(ii)(A) of Rule 17a-4 and paragraph (f)(1)(ii)(A) of Rule 18a-6, as amended.

records (collectively, “records access”) by a representative or designee of the Commission as permitted under the law.²¹³ Further, in the case of a broker-dealer, the third party also must undertake to facilitate within its ability, and not impede or prevent, a trustee appointed under SIPA to liquidate the broker-dealer in accessing, downloading, or transferring the records as permitted under the law.²¹⁴ These undertakings are designed to address the fact that, while the broker-dealer or SBS Entity has independent access to the records, the third party owns and/or operates the servers or other storage devices on which the records are stored. Therefore, the third party can block records access. In the Alternative Undertaking, the third party will need to agree not to take such an action. Further, the third party will need to agree to facilitate *within its ability* records access. This does not mean that the third party must produce a hard copy of the records or take the other actions that are agreed to in the Traditional Undertaking. Rather, it means that the third party undertakes to provide to the Commission representative or designee or SIPA trustee the same type of technical support with respect to records access that it would provide to the broker-dealer or SBS Entity in the normal course.

For these reasons, the Commission is adopting amendments to Rules 17a-4(i) and 18a-6(f) to provide an alternative to the Traditional Undertaking to accommodate the use of cloud service providers by broker-dealers and SBS Entities.²¹⁵

The Commission notes that the Financial Industry Regulatory Authority (“FINRA”) commented on the proposing release by reiterating the concerns it has expressed in the past regarding the obligations of third parties that maintain and preserve Broker-Dealer Regulatory Records pursuant to Rule 17a-4(i).²¹⁶ Specifically, FINRA staff has “expressed concerns that

²¹³ See paragraph (i)(1)(ii)(A) of Rule 17a-4 and paragraph (f)(1)(ii)(A) of Rule 18a-6, as amended.

²¹⁴ See paragraph (i)(1)(ii)(A) of Rule 17a-4. SBS Entities are not members of SIPC.

²¹⁵ See paragraph (i)(1)(ii) of Rule 17a-4 and paragraph (f)(1)(ii) of Rule 18a-6, as amended.

²¹⁶ See letter from Michael A. Macchiaroli, Associate Director, Division of Trading and Markets, Commission, to Kris Dailey, Vice President, Risk Oversight & Operational Regulation, FINRA, dated Apr. 12, 2018. (“Third-Party Record Preservation Letter”). FINRA serves as the examining authority for most broker-dealers.

broker-dealers are entering into contracts with third-party recordkeeping service providers that have provisions permitting the service provider to delete or discard the broker-dealer's records required to be preserved pursuant to Rules 17a-3 and 17a-4, typically in response to non-payment by the broker-dealer of fees due under the contract but also in other circumstances.”²¹⁷ In adopting Rule 17a-4(i), the Commission emphasized that the records of a broker-dealer must be available at all times for examination in order to assure the protection of customers.²¹⁸ Prior to adopting the rule, the Commission had found that, in situations where a broker-dealer or its service providers were experiencing financial difficulty, the records of the broker-dealer had not always been available to the broker-dealer or to the Commission. The Commission adopted Rule 17a-4(i) “to assure the accessibility of broker-dealer records in situations where, for example, a service bureau refuses to surrender the records due to nonpayment of fees.”²¹⁹ Contractual provisions that would permit, among other things, a service provider to withhold, delete, or discard records in the event of non-payment by the broker-dealer are inconsistent with the retention requirements of Rule 17a-4 and the undertaking requirements of Rule 17a-4(i).²²⁰ Moreover, if a third party deletes or discards a broker-dealer's records in a manner that is not consistent with the retention requirements in Rule 17a-4, such action would constitute a primary violation of the rule by the broker-dealer and may subject the service provider to secondary liability for causing or aiding and abetting the violation. The same holds true with respect to

²¹⁷ *Id.*

²¹⁸ *See Recordkeeping by Brokers and Dealers*, Exchange Act Release No. 13962 (Sept. 15, 1977), 42 FR 47551, 47552 (Sept. 21, 1977) (“17a-4(i) Adopting Release”).

²¹⁹ *Id.*; *Filing of Agreements by Outside Service Bureaus*, Exchange Act Release No. 13273 (Feb. 16, 1977), 42 FR 10698, 10698 (Feb. 23, 1977). *See also Statement Regarding the Maintenance of Current Books and Records by Brokers and Dealers*, Exchange Act Release No. 10756 (Apr. 26, 1974), 39 FR 16440, 16441 (May 9, 1974) (“If a broker-dealer hires or engages an outside service bureau or other recordkeeping service to handle its records, the requirement to make and keep current the broker-dealer's books and records is in no way diminished and under such circumstances the broker-dealer is responsible to the same degree for maintaining current books and records as if he were maintaining them himself. Where a broker-dealer undertakes to have his books and records prepared and maintained by a service bureau or recordkeeping service, he should assure himself that the service will be provided in conformity with the Commission recordkeeping rules.”).

²²⁰ *See* 17a-4(i) Adopting Release, 42 FR at 47551.

Rule 18a-6(f). The Commission clarifies that any contractual provisions between a broker-dealer or SBS Entity and a third-party service provider that would allow the latter to withhold, delete, or discard records – electronic or otherwise – in the event of non-payment by the broker-dealer or SBS Entity are inconsistent with the retention requirements of Rule 17a-4 or 18a-6, as applicable, and the undertaking requirements of Rule 17a-4(i) or 18a-6(f), as applicable.

H. Requirement to Produce Electronic Records in a Reasonably Usable Electronic Format

Paragraph (j) of Rule 17a-4 (“Rule 17a-4(j)”) requires broker-dealers to furnish promptly to the Commission legible, true, complete, and current copies of those records of the firm that are required to be preserved under Rule 17a-4 or any other record of the firm that is subject to examination under Section 17(b) of the Exchange Act.²²¹ Paragraph (g) of Rule 18a-6 (“Rule 18a-6(g)”) requires SBS Entities to furnish promptly to a representative of the Commission legible, true, complete, and current copies of those records of the firm that are required to be preserved under Rule 18a-6, or any other records of the firm subject to examination or required to be made or maintained pursuant to Section 15F of the Exchange Act.²²²

The Commission proposed to amend Rule 17a-4(j) to require that a broker-dealer must furnish any record and its audit trail (if applicable) preserved electronically pursuant to Rule 17a-4(f) in a reasonably usable electronic format, if requested by a representative of the Commission.²²³ The Commission similarly proposed to amend Rule 18a-6(g) to require SBS Entities to furnish any record preserved electronically pursuant to Rule 18a-6(e) in a reasonably usable electronic format, if requested by a representative of the Commission. One commenter

²²¹ Section 17(b) of the Exchange Act provides, in pertinent part, that all records of a broker-dealer are subject at any time, or from time to time, to such reasonable periodic, special, or other examinations by representatives of the Commission and the appropriate regulatory agency for such persons as the Commission or the appropriate regulatory agency for such persons deems necessary or appropriate in the public interest, for the protection of investors, or otherwise in furtherance of the purposes of the Exchange Act. *See* 15 U.S.C. 78q(b).

²²² Section 15F(f)(1) of the Exchange Act provides, in pertinent part, that SBSs and MSBSPs shall keep books and records required by Commission rule open to inspection and examination by any representative of the Commission. *See* 15 U.S.C. 78o-10(f)(1).

²²³ *See* Proposing Release, 86 FR at 68311.

stated that the Commission “should consider including a minimal list of acceptable formats.”²²⁴

In the interests of keeping the requirements as technologically neutral as possible and not identifying formats that could become obsolete, the Commission believes it would not be appropriate to provide examples; however, it notes that a reasonably usable electronic format would be a format that is common and compatible with commonly used systems for accessing and reading electronic records.

A commenter stated that the “proposed amendments, requiring the record and its audit trail, are appropriate, but only if explicitly requested by a representative of the Commission.”²²⁵

The commenter explained that the amendment could “be interpreted to mean that any time a record is requested, and it is stored in an electronic recordkeeping system, as proposed, the record’s audit trail must also be delivered.” The objective of the amendments is to require the broker-dealer or SBS Entity to provide records stored electronically in a reasonably usable electronic format if requested by a representative of the Commission and, if also requested by a representative of the Commission, the audit trails of the records in a reasonably usable electronic format. The request of the Commission representative will govern whether the broker-dealer or SBS Entity must produce the record, the audit trail of the record, or both the record and its audit trail.

For these reasons and the reasons stated in the proposing release,²²⁶ the Commission is adopting the prompt production of records amendments as proposed.²²⁷

I. Compliance Date

A commenter stated that regulated entities should be given 18 months to comply with the rules as amended, stating, “[t]his will give Regulated Entities time to develop, implement, and test changes that they believe will be necessary to comply with the amended rules” and that this

²²⁴ NRS Letter.

²²⁵ *Id.*

²²⁶ *See* Proposing Release, 86 FR at 68311.

²²⁷ *See* paragraph (j) of Rule 17a-4 and paragraph (g) of Rule 18a-6, as amended.

“is particularly acute for non-bank SBS Entities given that they will now have to comply with either an audit trail or WORM requirement for the first time.”²²⁸ For the reasons discussed below, the Commission is not setting the compliance date as 18 months after publication in the **Federal Register** as suggested by the commenter. Instead, for the reasons discussed below, the compliance date for the amendments to Rule 17a-4 is six months after the amendments are published in the **Federal Register**, while the compliance date for the amendments to Rule 18a-6 is twelve months after the amendments are published in the **Federal Register**.

Under the final amendments to Rule 17a-4, broker-dealers can continue to use their existing WORM-compliant electronic recordkeeping systems and transition to audit-trail compliant systems over time when they are ready to implement an electronic recordkeeping system that meets that requirement. However, the final amendments will require them to be able to produce a record in a human readable and reasonably usable electronic format. In addition, while they can continue to use their existing Designated Third Party, updated undertakings will need to be filed with the broker-dealer’s DEAs because of the amendments to the format of the undertakings. Also, if they use a cloud service provider and a Traditional Undertaking from the provider has not been filed with the Commission, a Traditional or Alternative Undertaking will need to be filed.²²⁹ The Commission believes that these new requirements – that is, ensuring that records are produced in a human readable and reasonably usable electronic format, filing updated undertakings with the DEAs, and, if necessary, ensuring that a cloud service provider has filed a Traditional or Alternative Undertaking with the Commission – are relatively minor. The Commission believes that given that broker-dealers themselves presumably need access to – and the ability to read – their own records retained by means of an electronic recordkeeping system, most, if not all, broker-dealer electronic records should already be produced in a human readable

²²⁸ SIFMA Letter.

²²⁹ If a cloud service provider has filed a Traditional Undertaking on behalf of a broker-dealer or SBS Entity and the conditions for filing the Alternative Undertaking can be met, the cloud service provider could file the Alternative Undertaking to replace the Traditional Undertaking.

and reasonably usable electronic format. Furthermore, the Commission believes that since the exact wording of the undertakings required to be updated or filed with a broker-dealer's DEA or the Commission (whether by the broker-dealer or its cloud service provider) is set forth in the rule text, executing such undertakings should not be a particularly time-consuming activity. Finally, the Commission believes that should any broker-dealers need to amend their contractual agreements with their cloud service providers to reflect the new requirements being adopted in this document, the straightforward nature of the new requirements will mean that the drafting and execution of any such contractual amendments should be a simple matter. For these reasons, the Commission believes that six months after publication in the **Federal Register** will be sufficient time to come into compliance with these new requirements.

SBS Entities will be required to take more actions than broker-dealers to come into compliance with the requirements. Under the amendments to Rule 18a-6, nonbank SBS Entities that maintain and preserve their records in an electronic format will need to implement electronic recordkeeping systems that meet either the audit-trail or WORM requirement. The Commission believes that SBS Entities will elect to configure their electronic recordkeeping existing systems to meet the audit-trail requirement, given the benefits of that approach. Therefore, they may not need to build new electronic recordkeeping systems. All SBS Entities will need to be able to produce a record and, if applicable its audit trail, in a human readable and reasonably usable electronic format. In addition, either Designated Executive Officer or Designated Third Party undertakings will need to be filed with the Commission with respect to all SBS Entities (unlike with respect to broker-dealers, this is a new requirement). Also, if SBS Entities use a cloud service provider and a Traditional Undertaking from the provider has not been filed with the Commission, a Traditional or Alternative Undertaking will need to be filed. Since, as noted above, SBS Entities, unlike broker-dealers, were not subject to a requirement that their electronic recordkeeping systems be WORM compliant prior to the amendments being adopted in this document, the Commission anticipates that some SBS Entities may have to configure their

existing electronic recordkeeping systems to either requirement. Based on staff experience and given the relative size and sophistication of SBS Entities, however, the Commission believes that twelve months after publication in the **Federal Register** will be sufficient time for SBS Entities to come into compliance with these new requirements.

For the foregoing reasons, the compliance date for the amendments to Rule 17a-4 is six months after the amendments are published in the **Federal Register** and the compliance date for the amendments to Rule 18a-6 is twelve months after the amendments are published in the **Federal Register**.

III. DESIGNATION OF BROKER-DEALER EXAMINING AUTHORITIES

FINRA, which serves as the DEA for most broker-dealers, raised a concern with the proposal to eliminate the third-party undertakings requirement from Rule 17a-4(f).²³⁰ This commenter stated if a broker-dealer refuses to provide records in the course of the examination or investigation, the commenter has “the ability to obtain the records directly from the independent third party that has access to the records consistent with Exchange Act Rule 17a-4(f)(3)(vii).” The commenter recommended that the Commission amend Rule 17a-4(i) to expressly identify a broker-dealer’s DEA as an entity to whom the broker-dealer must make its records available and to whom the broker-dealer must promptly furnish a true, correct, complete and current hard copy of any or all or any part of such books and records.

As discussed above, the Traditional Undertaking set forth in Rule 17a-4(i) requires a third party who prepares or maintains Broker-Dealer Regulatory Records to file a written undertaking with the Commission signed by a duly authorized person.²³¹ The Traditional Undertaking must include a provision whereby the third party agrees, among other things, to permit examination of the records by representatives or *designees* of the Commission as well as to promptly furnish to

²³⁰ See FINRA Letter.

²³¹ See section II.G of this release (discussing the Traditional Undertaking). See also paragraph (i)(1)(ii)(A) of Rule 17a-4, as amended (setting forth the Traditional Undertaking).

the Commission or its *designee* true, correct, complete, and current hard copies of any or all or any part of such books and records. Further, the Alternative Undertaking also refers to *designees* of the Commission.²³² Finally, under the final amendments, the provisions of Rule 17a-4(f) setting forth the undertakings required of the Designated Executive Officer or Designated Third Party also refer to *designees* of the Commission.²³³

The broker-dealer examining authorities are examiners of broker-dealer compliance with the securities laws. Therefore, they play a critical role in supporting the Commission's oversight of broker-dealers. For these reasons, the broker-dealer examining authorities should have the same level of access to a broker-dealer's records as is afforded the Commission under Rules 17a-4(f) and 17a-4(i). Consequently, the Commission is hereby designating a broker-dealer's examining authorities as a Commission designee for the purposes of Rules 17a-4(f) and 17a-4(i).

IV. PAPERWORK REDUCTION ACT

Certain provisions of the rule amendments being adopted in this release contain a new "collection of information" within the meaning of the Paperwork Reduction Act of 1995 ("PRA").²³⁴ The Commission submitted the proposed rule amendments and proposed new rules to the Office of Management and Budget ("OMB") for review and approval in accordance with the PRA and its implementing regulations.²³⁵ The Commission's earlier PRA assessments have been revised to reflect the modifications to the rules and amendments from those that were proposed, as well as additional information and data now available to the Commission. An agency may not conduct or sponsor, and a person is not required to respond to a collection of information, unless it displays a currently valid OMB control number.²³⁶ The titles and OMB control numbers for the collections of information are:

²³² See also paragraph (i)(1)(ii)(B) of Rule 17a-4, as amended (setting forth the Alternative Undertaking).

²³³ See paragraph (f)(3)(v)(A) of Rule 17a-4, as amended.

²³⁴ See 44 U.S.C. 3501 *et seq.*

²³⁵ See 44 U.S.C. 3507; 5 CFR 1320.11.

²³⁶ See 5 CFR 1320.11(l).

- (1) Rule 17a-4 – Records to be preserved by certain brokers and dealers (OMB control number 3235-0279); and
- (2) Rule 18a-6 – Records to be preserved by certain security-based swap dealers and major security-based swap participants (OMB control number 3235-0751).

The burden estimates contained in this section do not include any other possible costs or economic effects beyond the burdens required to be calculated for PRA purposes.

A. Summary of Collections of Information

1. Amendments to Rules 17a-4(f) and 18a-6(e)

Rule 17a-4 sets forth record preservation requirements applicable to broker-dealers, including broker-dealers also registered as SBSDs or MSBSPs.²³⁷ Rule 18a-6 sets forth record preservation requirements applicable to SBS Entities that are not dually registered as broker-dealers.²³⁸ The Commission is amending Rules 17a-4(f)²³⁹ and 18a-6(e),²⁴⁰ which prescribe requirements for broker-dealers and SBS Entities, respectively, that elect to preserve records electronically to comply with the record preservation requirements of Rules 17a-4 and 18a-6, respectively.

The amendments to Rule 17a-4(f) add an audit-trail alternative to the existing WORM requirement.²⁴¹ The amendments to Rule 18a-6(e) add a requirement that electronic recordkeeping systems used by nonbank SBS Entities, which currently do not have a WORM requirement, must comply with either the audit-trail requirement or the WORM requirement.²⁴²

²³⁷ See 17 CFR 240.17a-4. As stated above, the term “broker-dealer” for the purposes of this release includes broker-dealers that are also registered as SBSDs or MSBSPs.

²³⁸ See 17 CFR 240.18a-6. As stated above, the term “SBS Entity” for the purposes of this release refers to SBSDs and MSBSPs that are not also registered as broker-dealers.

²³⁹ See Rule 17a-4(f) (setting forth the electronic record preservation requirements for broker-dealers).

²⁴⁰ See Rule 18a-6(e) (setting forth the electronic record preservation requirements for SBS Entities).

²⁴¹ See section II.D.2. of this release (discussing these amendments in more detail).

²⁴² As defined above, the term “nonbank SBS Entity” refers to an SBS Entity that does not have a prudential regulator and the term “bank SBS Entity” refers to an SBS Entity that has a prudential regulator.

Rule 17a-4(f) requires a broker-dealer to store separately from the original, on any medium acceptable under Rule 17a-4, a duplicate copy of a record for the requisite time period. Similarly, Rule 18a-6(e) requires that an SBS Entity store separately from the original a duplicate copy of a record stored on the electronic storage system for the requisite time period. These provisions require broker-dealers and SBS Entities to maintain a second copy of a record. The Commission proposed to amend both of these paragraphs to require the broker-dealer and the SBS Entity to maintain a backup set of records when records are preserved on an electronic recordkeeping system. Under the proposed new requirements, a broker-dealer or SBS Entity electing to use an electronic recordkeeping system would have been required to employ a second electronic recordkeeping system as a backup.

In response to comments received, the Commission is replacing these proposed requirements with a requirement that a broker-dealer or SBS Entity electing to use an electronic recordkeeping system must either: (1) include a backup electronic recordkeeping system that meets the other requirements for electronic recordkeeping systems and that retains the records required to be maintained and preserved pursuant to Rules 17a-3 and 17a-4 (for broker-dealers) or Rules 18a-5 and 18a-6 (for SBS Entities) in accordance with the relevant rules in a manner that will serve as a redundant set of records if the original electronic recordkeeping system is temporarily or permanently inaccessible; or (2) have other redundancy capabilities that are designed to ensure access to the records required to be maintained and preserved pursuant to Rules 17a-3 and 17a-4 (for broker-dealers) or Rules 18a-5 and 18a-6 (for SBS Entities).²⁴³ The Commission is adding the “other redundancy capabilities” alternative to the proposed backup system requirement in response to comments that redundancy is a broader concept than a back-

²⁴³ See section II.D.6. of this release (discussing these amendments in more detail). Note that, as discussed above, the proposed amendments were to paragraph (f)(3) of Rule 17a-4 and paragraph (e)(3) of Rule 18a-6, while the amendments as adopted are to paragraph (f)(2) of Rule 17a-4 and paragraph (e)(2) of Rule 18a-6. Although the placement of the rule text as adopted does not apply to bank SBS Entities (as opposed to the placement of the rule text as proposed), this does not alter the applicable PRA burden estimates for either rule.

up recordkeeping system and will therefore give firms more flexibility than would a back-up recordkeeping system requirement without the alternative.

Rule 17a-4(f) also requires that, for every broker-dealer exclusively using electronic storage media for some or all of its record preservation, at least one third party, who has access to and the ability to download information from the broker-dealer's electronic storage media to any acceptable medium under Rule 17a-4, must file with the examining authority for the broker-dealer certain undertakings that the third party will provide access to the broker-dealer's electronic records and provide them to the Commission and other securities regulators if requested. The proposed amendments to Rule 17a-4(f) would have eliminated the third-party access and undertakings requirements and replaced them with a requirement that a senior officer of the broker-dealer have the access and provide the necessary undertakings. In addition, the proposed amendments to Rule 18a-6(e), which does not have third-party access and undertakings requirements, would have added senior officer access and undertakings requirements analogous to that of Rule 17a-4(f) as proposed to be amended.

The amendments as adopted differ in two ways from the amendments as proposed.²⁴⁴ First, the Commission is adopting the proposed senior officer access and undertakings requirements in both Rules 17a-4(f) and 18a-6(e); however, in response to comments, while the amendments as adopted require that one senior officer at the executive level (the Designated Executive Officer) execute the undertaking and bear the responsibility for fulfilling the obligations under the undertaking, they also allow the Designated Executive Officer to appoint in writing up to two employees (the "designated officers") who report directly or indirectly to the executive officer to act on behalf of the executive officer if the executive officer is not available to take the steps necessary to meet the executive officer's obligations under the undertaking. In addition, the Designated Executive Officer may appoint in writing up to three professionals

²⁴⁴

See section II.E.6. of this release (discussing these modifications in more detail).

(“designated specialists”) over whom the Designated Executive Officer and the designated officers have authority to take the steps necessary to access the records. Second, in response to comments, the Commission is retaining the existing third-party access and undertakings option as an alternative in Rule 17a-4(f) and adding the option of third-party access and undertakings to Rule 18a-6(e) as an alternative to the new Designated Executive Officer access and undertakings requirement of that rule, as amended. As such, under the amendments as adopted, the access and undertakings requirements of both Rules 17a-4(f) and 18a-6(e) may be fulfilled by either a Designated Executive Officer or a Designated Third Party.

The Commission is amending Rule 18a-6 to remove, for bank SBS Entities, the requirements for electronic recordkeeping systems set forth in paragraph (e)(2) of Rule 18a-6.²⁴⁵ However, the other provisions of paragraph (e) of Rule 18a-6, as amended, continue to apply to all SBS Entities.

The Commission is amending Rule 17a-4(f) to move the requirements for broker-dealers using micrographic media to new paragraph (f)(4).²⁴⁶ Rule 18a-6(e) does not provide for retaining records using micrographic media.

The amendments to Rule 17a-4(f) eliminate a requirement that the broker-dealer notify its DEA before employing an electronic recordkeeping system.²⁴⁷ Rule 18a-6(e) does not have a similar DEA notification requirement.

2. Amendments to Rules 17a-4(i) and 18a-6(f)

Rules 17a-4(i) and 18a-6(f) require a third party who prepares or maintains the regulatory records of a broker-dealer or SBS Entity (regardless of whether the records are in paper or electronic form) to file a written undertaking with the Commission signed by a duly authorized person. The undertaking must include a provision whereby the third-party agrees, among other

²⁴⁵ See section II.D.1. of this release (discussing these amendments in more detail).

²⁴⁶ See section II.F. of this release (discussing these amendments in more detail).

²⁴⁷ See section II.C. of this release (discussing these amendments in more detail).

things, to permit examination of the records by representatives or designees of the Commission as well as to promptly furnish to the Commission or its designee true, correct, complete, and current hard copies of any or all or any part of such books and records. Some broker-dealers and SBS Entities maintain their electronic recordkeeping systems and associated electronic records on servers or other storage devices that are owned or operated by a third party (*e.g.*, a cloud service provider). The broker-dealer or SBS Entity controls the electronic recordkeeping system and the access to the electronic records preserved on the system. Consequently, the third parties state that they cannot provide the undertaking required under Rules 17a-4 and 18a-6.

The Commission is amending the Rules 17a-4(i) and 18a-6(f) to address this development in electronic recordkeeping practices.²⁴⁸ Under the amendments, the third party may provide an alternative undertaking (*i.e.*, the Alternative Undertaking) that is tailored to how cloud service providers hold electronic records for broker-dealers and SBS Entities. The use of the Alternative Undertaking is subject to certain conditions, including that the records are maintained on an electronic recordkeeping system and the broker-dealer or SBS Entity has independent access to the records meaning, among other things, the broker-dealer can access the records without the need of any intervention of the third party. Consequently, the Alternative Undertaking cannot be used if the records maintained and preserved by the third party are not maintained and preserved by means of an electronic recordkeeping system (*e.g.*, it cannot be used if the records are in paper form). It also cannot be used if the broker-dealer or SBS Entity must rely on the third party to take an intervening step to make the records available to the broker-dealer or SBS Entity (*e.g.*, it cannot be used if the broker-dealer or SBS Entity must ask the third party to transfer copies of the records to the broker-dealer or SBS Entity or must ask the third party to first decrypt the records before they can be accessed).

²⁴⁸ See section II.G. of this release (discussing these amendments in more detail).

In the Alternative Undertaking, the third party must, among other things, acknowledge that the records are the property of the broker-dealer or SBS Entity and that the broker-dealer or SBS Entity has represented to the third party that the broker-dealer or SBS Entity: (1) is subject to rules of the Commission governing the maintenance and preservation of certain records; (2) has independent access to the records maintained by the third party; and (3) consents to the third party fulfilling the obligations set forth in the undertaking. Further, the third party must undertake to facilitate within its ability, and not impede or prevent, the examination, access, download, or transfer of the records by a representative or designee of the Commission as permitted under the law. In the case of a broker-dealer, the third party must also undertake to facilitate within its ability, and not impede or prevent, a trustee appointed under SIPA to liquidate the broker-dealer in accessing, downloading, or transferring the records as permitted under the law.

3. Amendments to Rules 17a-4(j) and 18a-6(g)

Rule 17a-4(j) requires broker-dealers to furnish promptly to the Commission legible, true, complete, and current copies of those records of the firm that are required to be preserved under Rule 17a-4 or any other record of the firm that is subject to examination under Section 17(b) of the Exchange Act. Rule 18a-6(g) requires SBS Entities to furnish promptly to a representative of the Commission legible, true, complete, and current copies of those records of the firm that are required to be preserved under Rule 18a-6, or any other records of the firm subject to examination or required to be made or maintained pursuant to Section 15F of the Exchange Act.

The Commission is amending the prompt production of records requirements of Rules 17a-4(j) and 18a-6(g).²⁴⁹ The amendments to Rules 17a-4(j) and 18a-6(g) require a broker-dealer or SBS Entity, respectively, to furnish a record and its audit trail (if applicable) preserved on

²⁴⁹ See section II.H. of this release (discussing these amendments in more detail).

an electronic recordkeeping system pursuant to Rules 17a-4(f) and 18a-6(e), respectively, in a reasonably usable electronic format, if requested by a representative of the Commission.

The Commission did not receive any comments specifically pertaining to the PRA estimates set forth in the proposing release.

B. Proposed Use of Information

The requirements of Rules 17a-4(f) and 18a-6(e), including the amendments to these rules being adopted in this document, are designed, among other things, to promote the prudent operation of broker-dealers and SBS Entities and to assist the Commission, SROs, and state securities regulators in conducting effective examinations.²⁵⁰ The amendments to Rules 17a-4(j) and (i) and 18a-6(g) and (f) are designed to facilitate examinations and other regulatory reviews by making records accessible and examinations more efficient. Taken as a whole, the collections of information under the amendments to Rules 17a-4(f), (i), and (j) and 18a-6(e), (g), and (f) are designed to promote the prudent operation of broker-dealers and SBS Entities and facilitate the examinations of broker-dealers and SBS Entities by the Commission and other relevant securities regulators (*e.g.*, SROs and state securities regulators).

C. Respondents

As of December 31, 2021, there were 3,508 broker-dealers registered with the Commission.²⁵¹ As of July 31, 2022, 48 SBSDs have registered with the Commission, while no MSBSPs have registered with the Commission.²⁵² Six of the SBSDs are existing broker-dealers and, therefore, are included in the 3,508 broker-dealers. Twenty-one of the SBSDs are applying

²⁵⁰ See, *e.g.*, *Books and Records Requirements for Brokers and Dealers Under the Securities Exchange Act of 1934*, Exchange Act Release No. 44992 (Oct. 26, 2001), 66 FR 55818 (Nov. 2, 2001) (“The Commission has required that broker-dealers create and maintain certain records so that, among other things, the Commission, [SROs], and State Securities Regulators . . . may conduct effective examinations of broker-dealers” (footnote omitted)).

²⁵¹ This estimate is derived from broker-dealer FOCUS filings as of December 31, 2021, as described in greater detail in the economic baseline, and is inclusive of seven OTC derivatives dealers affected by the final amendments.

²⁵² See *List of Registered Security-Based Swap Dealers and Major Security-Based Swap Participants*, available at: <https://www.sec.gov/tm/List-of-SBS-Dealers-and-Major-SBS-Participants>.

substituted compliance with respect to the requirements of Rule 18a-6.²⁵³ Two SBSDs are using the alternative compliance mechanism of 17 CFR 240.18a-10 (Exchange Act Rule 18a-10) and, therefore, complying with the CFTC's recordkeeping rules.²⁵⁴ This leaves nineteen SBSDs that are subject to Rule 18a-6 and, therefore, will be subject to the amendments to that rule.

Seventeen of these SBSDs have a prudential regulator and also are registered with the CFTC as swap dealers. Because these seventeen SBSDs have a prudential regulator, they will not be subject to paragraph (e)(2) of Rule 18a-6. This leaves two SBSDs that will be subject to paragraph (e)(2) of Rule 18a-6. These SBSDs are not dually registered with the CFTC.

The following table summarizes the estimated number of broker-dealers (respondents) that will be subject to the amendments to Rule 17a-4 and the number of SBSDs (respondents) that will be subject to the amendments to Rule 18a-6 and those that will be specifically subject to paragraph (e)(2) of Rule 18a-6 (*i.e.*, non-bank SBSDs).

| Type of Registrant | Number |
|--|---------------|
| Broker-dealers (including SBSDs dually registered as broker-dealers) | 3,508 |
| SBSDs that will be subject to Rule 18a-6, as amended | 19 |
| SBSDs that will be subject to Rule 18a-6(e)(2), as amended | 2 |

Based upon the recent experience of the staff, the Commission estimates that approximately 95% of the broker-dealers, including broker-dealers that will be dually registered as SBS Entities, (*i.e.*, 3,333 broker-dealers) use electronic recordkeeping systems; all of these firms are expected to continue to use electronic recordkeeping systems pursuant to the requirements of Rule 17a-4(f), as amended. The Commission believes that all SBSDs that are subject to Rule 18a-6(e) (*i.e.*, 19 SBSDs) use electronic recordkeeping systems pursuant to the requirements of Rule 18a-6(e) and will continue to do so under the amendments.

Finally, based on staff experience, the Commission estimates that 500 of the broker-dealers and 10 of the SBSDs currently employ cloud service providers for electronic

²⁵³ See *Substituted Compliance Notices*, available at: <https://www.sec.gov/tm/Substituted-compliance-Notices>.

²⁵⁴ See 17 CFR 240.18a-10.

recordkeeping purposes and will be required to obtain the Alternative Undertaking from a cloud service provider (*i.e.*, an undertaking tailored to how cloud service providers hold electronic records for broker-dealers and SBSBs) discussed above. Further, based on staff experience and discussions with the industry, the Commission estimates that the five different cloud service providers currently used by broker-dealers for electronic recordkeeping purposes will need to execute these 510 Alternative Undertakings and that each has approximately an equal number of broker-dealer and SBSB clients. Therefore, the Commission estimates that each cloud service provider will need to execute 102 Alternative Undertakings.

D. Total Initial and Annual Reporting Burdens

1. Amendments to Rules 17a-4(f) and 18a-6(e)

Rules 17a-4(f) and 18a-6(e) currently impose collection of information requirements that result in initial and annual time burdens for broker-dealers and SBSBs. The amendments to these rules will both add to and decrease the current time burden estimates as explained below.

The amendments to Rule 17a-4(f) provide an audit-trail alternative to the current WORM requirement for electronic recordkeeping systems used by broker-dealers to meet the record preservation requirements of Rule 17a-4.²⁵⁵ Consequently, broker-dealers may continue to meet the requirements of the rule by using any WORM-compliant electronic recordkeeping system they employ today. The amendments to Rule 18a-6(e) add a requirement that electronic recordkeeping systems used by nonbank SBSBs to comply with the record preservation requirements of Rule 18a-6 must meet either the audit-trail or WORM requirement.²⁵⁶

The Commission believes that few, if any, broker-dealers or nonbank SBSBs that use electronic recordkeeping systems are not currently compliant with the rules, as amended, either because they currently use an electronic recordkeeping system that meets the WORM requirement or because they currently use one that can meet the proposed audit-trail requirement.

²⁵⁵ See section II.D.2. of this release (discussing these amendments in more detail).

²⁵⁶ *Id.*

Indeed, the Commission believes that some broker-dealers are currently using a modern, audit-trail compliant electronic recordkeeping system for their own business purposes while simultaneously maintaining a WORM-compliant system solely for the purpose of complying with the requirements of Rule 17a-4(f).

A broker-dealer that does not preserve records electronically will incur initial costs to build an electronic recordkeeping system that meets either the WORM requirement or the audit-trail requirement or will have the initial burden of hiring a vendor to provide the service. A broker-dealer that preserves records electronically using a WORM-compliant electronic recordkeeping system will have an initial burden to build an electronic recordkeeping system that meets the audit-trail requirement, if it elects to use that alternative. An SBSB subject to the requirements of paragraph (e)(2) of Rule 18a-6 will have an initial burden either to build an electronic recordkeeping system that meets either the WORM requirement or the audit-trail requirement or to hire a vendor to provide the service. Similarly, on an ongoing basis, the broker-dealer or SBSB will be required to expend financial or human resources to maintain their recordkeeping systems to comply with the audit-trail or WORM requirements.

Based upon information provided to the Commission by the securities industry, the Commission estimates that the initial cost to build and implement a WORM-compliant electronic recordkeeping system for a large broker-dealer or SBSB Entity is \$10 million, with an additional cost of \$1.2 million annually to maintain the system.²⁵⁷ Based on feedback from the securities industry, the Commission believes that the initial cost to build and implement an electronic recordkeeping system that meets the audit-trail requirements and the ongoing cost to maintain the system will be substantially lower than the analogous costs that would be incurred with respect to a WORM-compliant system.²⁵⁸ Consequently, the Commission estimates that the initial cost to build and implement an electronic recordkeeping system that meets the audit-trail

²⁵⁷ See Rule 17a-4(f) Rulemaking Petition Addendum at 4-5.

²⁵⁸ See e.g. Rule 17a-4(f) Rulemaking Petition at 6-7.

requirement for a large broker-dealer is \$1,000,000, with an additional cost of \$120,000 annually to maintain the system.

As of December 31, 2021, there were 854 broker-dealers with assets equal to or exceeding \$10 million and two SBSs that will be subject to paragraph (e)(2) of Rule 18a-6. The Commission does not believe any of these firms will elect to build a WORM-compliant electronic recordkeeping system. Moreover, the Commission estimates that most of these firms have electronic recordkeeping systems that meet the audit-trail requirement or that could be configured to meet that requirement without the need to build a new system. The Commission estimates that 20 of these firms will elect to modernize their recordkeeping process by building a new electronic recordkeeping system to meet the audit-trail requirement for an initial one-time industry cost burden of \$20,000,000 and an annual cost burden of \$2,400,000.

The Commission estimates that the cost for the 2,654 broker-dealers with less than \$10,000,000 in total assets to build and maintain an electronic recordkeeping system that meets the proposed audit-trail requirement will be significantly less than the \$1,000,000 initial and \$120,000 annual costs estimated for the 854 larger broker-dealers and the two SBSs that will be subject to paragraph (e)(2) of Rule 18a-6. Consequently, the Commission estimates that the initial cost to build and implement an electronic recordkeeping system that meets the audit-trail requirement for these smaller broker-dealers is \$100,000, with an additional cost of \$12,000 annually to maintain the system. The Commission estimates that most of the 2,654 broker-dealers with less than \$10,000,000 in total assets will continue to preserve records in the manner they do today: using a WORM-compliant system, using micrographic media, or maintaining paper records. The Commission estimates that 80 of these firms will elect to build a new electronic recordkeeping system to meet the audit-trail requirement for an initial one-time industry cost burden of \$8,000,000 and an annual cost burden of \$960,000.

The Commission believes that broker-dealers and SBSs will incur an initial burden and ongoing annual burden in order to meet the requirement that a broker-dealer or SBS Entity

electing to use an electronic recordkeeping system either: (1) include a backup electronic recordkeeping system that meets the other requirements for electronic recordkeeping systems and that retains the records required to be maintained and preserved pursuant to Rules 17a-3 and 17a-4 (for broker-dealers) or Rules 18a-5 and 18a-6 (for SBS Entities) in accordance with the relevant rules in a manner that will serve as a redundant set of records if the original electronic recordkeeping system is temporarily or permanently inaccessible; or (2) have other redundancy capabilities that are designed to ensure access to the records required to be maintained and preserved pursuant to Rules 17a-3 and 17a-4 (for broker-dealers) or Rules 18a-5 and 18a-6 (for SBS Entities).²⁵⁹ This requirement could be fulfilled by a backup electronic recordkeeping system (as proposed), and the Commission believes these burdens and costs will be substantially less than the burdens and costs of the primary electronic recordkeeping systems because of the benefit of economies of scale for the backup system whereby common technology and personnel may be used for both systems. In addition, the Commission believes that some broker-dealers or SBS Entities electing to use an electronic recordkeeping system would employ a different means of ensuring they meet the redundancy requirement than building a backup system. The Commission estimates that the costs and burdens for the 854 larger broker-dealers and the two SBSs that are subject to paragraph (e)(2) of Rule 18a-6 will be \$250,000 in initial burdens and costs and \$30,000 in annual burdens and costs. Further, the Commission expects that the broker-dealers and SBSs that have electronic recordkeeping systems that could meet the audit-trail requirement or that could be configured to meet that requirement without the need to build a new system also maintain backup recordkeeping systems for business continuity purposes. Therefore, the Commission believes that initial and annual costs will be incurred by the 20 firms that elect to build a new electronic recordkeeping system that meets that proposed audit-trail requirement. Consequently, the Commission estimates that the industry-wide costs and burdens

²⁵⁹

See section II.D.6. of this release (discussing these amendments in more detail).

for these firms will be \$5,000,000 in initial costs and burdens and \$600,000 in annual costs and burdens.

The Commission estimates that the costs and burdens incurred by the 80 smaller broker-dealers that will build electronic recordkeeping systems to meet the audit-trail requirement and, therefore, will need to ensure that they meet the backup system or redundancy requirement, will be substantially less than the costs and burdens incurred by the larger broker-dealers. The Commission estimates that these firms will incur initial costs and burdens of \$25,000 and ongoing annual costs and burdens of \$3,000. Therefore, the Commission estimates that the industry-wide costs and burdens for these firms will be \$2,000,000 in initial costs and burdens and \$240,000 in ongoing annual costs and burdens.

The amendments to Rule 17a-4(f) replace the third-party access and undertakings requirement with a requirement to either continue to use a Designated Third Party for the access and undertakings requirement or instead name a Designated Executive Officer of the broker-dealer with the necessary authority and access to provide the necessary undertakings.²⁶⁰ Based on the Commission's most recent information submitted to the OMB in connection with the renewal of Rule 17a-4, for broker-dealers that elect the latter option, this will result in an estimated elimination of an annual cost of less than \$5,000 that the broker-dealer must incur in paying a third party to agree to perform this service. Rule 18a-6(e) does not contain a third-party undertakings requirement; however, the amendments to the rule add a requirement that either a Designated Third Party or a Designated Executive Officer complete the access and undertakings requirements in a manner analogous to the requirements of Rule 17a-4(f), as amended.²⁶¹ The

²⁶⁰ Throughout this section IV, to monetize the internal costs the Commission staff used data from the SIFMA publications, Management and Professional Earnings in the Securities Industry—2013, and Office Salaries in the Securities Industry—2013, modified by the Commission staff to account for an 1800 hour work-year and multiplied by 5.35 (professionals) or 2.93 (office) to account for bonuses, firm size, employee benefits and overhead. These figures have been adjusted for inflation through the end of 2020 using data published by the Bureau of Labor Statistics.

²⁶¹ As noted above, paragraph (f) of Rule 18a-6 includes a requirement that if the records required to be maintained and preserved by the SBS Entity (whether electronic or otherwise) are prepared or maintained

change in the format of the undertakings will require all broker-dealers to obtain new undertakings regardless of whether they elect to replace their Designated Third Party with a Designated Executive Officer. Therefore, the Commission estimates that this change and, in the case of SBSDs, the addition of a Designated Executive Officer or Designated Third Party undertakings requirement, will result in a one-time initial burden of one hour per firm, for a total of 3,333 hours for an initial cost of \$1,656,501 under Rule 17a-4(f) and 19 hours for an initial cost of \$9,443 for SBSDs under Rule 18a-6(e).²⁶² The Commission also believes that the Designated Third Party or Designated Executive Officer undertakings requirement will add an annual burden of one hour per firm, for a total of 3,333 hours for broker-dealers collectively,²⁶³ resulting in a total ongoing cost of \$1,656,501, and 19 hours for a total ongoing cost of \$9,443 for SBSDs collectively.²⁶⁴

The amendments move existing requirements for broker-dealers using micrographic media from paragraph (f)(3)(i) of Rule 17a-4 to new paragraph (f)(4) of Rule 17a-4, but do not change the substantive requirements. The amendments do not propose a micrographic media alternative for SBS Entities for the reasons described above. The Commission does not believe the amendments relating to micrographic media will have any impact on the burden experienced by broker-dealers or SBS Entities.

The Commission anticipates that eliminating the application of paragraph (e)(2) of Rule 18a-6 to the 17 SBSDs that have a prudential regulator and are subject to Rule 18a-6 will result

by a third party on behalf of the SBS Entity, the third party must file undertakings with the Commission. See paragraph (f) of Rule 18a-6.

²⁶² One-time initial cost for broker-dealers: 3,333 hours x \$497 per hour (at the controller hourly rate) = \$1,656,501. One time initial cost for SBSDs: 19 hours x \$497 per hour (at the controller hourly rate) = \$9,443.

²⁶³ The Commission believes that while the existing third-party requirement is an external burden, the senior officer requirement would be an internal burden required to be accounted for in this section.

²⁶⁴ Ongoing cost for broker-dealers: 3,333 hours x \$497 per hour (at the controller hourly rate) = \$1,656,501. Ongoing cost for SBSDs: 19 hours x \$497 per hour (at the controller hourly rate) = \$9,443. As discussed above, each affected entity that names a Designated Executive Officer to make undertakings instead of a third party may experience a cost savings of less than \$5,000 from not having to incur the payment to a third party agreeing to perform this service.

in a decrease of 100 hours per firm on an annual basis, or 1,700 hours per year for all firms affected by the amendment, for an ongoing cost savings of \$537,000 per year for all affected firms.²⁶⁵

Finally, based upon information provided to the Commission from FINRA staff, the Commission believes that the elimination of the DEA notification requirement will decrease the industry-wide burden of compliance by one hour per broker-dealer submitting the notice to its DEA, or approximately 433 hours per year, for an ongoing cost savings of \$136,828²⁶⁶ per year for the industry.

2. Amendments to Rules 17a-4(j) and 18a-6(g)

The amendments to Rules 17a-4(j) and 18a-6(g) require a broker-dealer or SBS Entity, respectively, to furnish a record and its audit trail (if applicable) preserved on an electronic recordkeeping system pursuant to Rules 17a-4(f) and 18a-6(e), respectively, in a reasonably usable electronic format, if requested by a representative of the Commission. The Commission does not believe that these amendments will change the initial or annual hourly burden for broker-dealers or SBS Entities.

3. Amendments to Rules 17a-4(i) and 18a-6(f)

The amendments to Rules 17a-4(i) and 18a-6(f) require broker-dealers and SBS Entities that use cloud service providers to draft and obtain an executed the Alternative Undertaking. The Commission believes that 500 of the broker-dealers and 10 of the SBSs will be required to obtain the alternative undertaking from cloud service providers and that this will result in a one-time initial burden of one hour per dealer, for a total of 510 hours and an initial cost of \$253,470.²⁶⁷ In addition, the Commission estimates that the need for the five cloud service

²⁶⁵ 1,700 hours x \$316 per hour (at the compliance manager rate) = \$537,000.

²⁶⁶ 433 hours x \$316 per hour (at the compliance manager rate) = \$136,828.

²⁶⁷ One-time initial cost for broker-dealers and SBSs: 510 hours x \$497 per hour (at the controller hourly rate) = \$253,470.

providers to review and execute the Alternative Undertaking will result in a one-time initial burden of 102 hours per provider, for a total of 510 hours and an initial cost of \$253,470.²⁶⁸

The estimated hourly burdens and estimated costs associated with the final amendments to Rules 17a-4 and 18a-6 are summarized in the following tables:

| Name of Information Collection | Summary of Hourly Burdens | | | | | |
|---|---------------------------|-----------------------|--------------------------------------|--------------------------------------|---|--|
| | Type of Burden | Number of Respondents | Initial Hourly Burden per Respondent | Ongoing Hourly Burden per Respondent | Initial Hourly Burden for all Respondents | Annual Hourly Burden for all Respondents |
| Third party or Designated Executive Officer Undertaking - BDs | Recordkeeping | 3,333 | 1 | 1 | 3,333 | 3,333 |
| Third party or Designated Executive Officer Undertaking – SBSDs | Recordkeeping | 19 | 1 | 1 | 19 | 19 |
| Elimination of electronic recordkeeping requirements for bank SBSDs | Recordkeeping | 17 | (100) | (100) | (1,700) | (1,700) |
| Elimination of the DEA notification requirement for BDs | Recordkeeping | 433 | (1) | (1) | (433) | (433) |
| Alternative undertaking – BDs and SBSDs | Recordkeeping | 510 | 1 | 0 | 510 | 0 |
| Alternative undertaking – Cloud Service Providers | Recordkeeping | 5 | 102 | 0 | 510 | 0 |

| Name of Information Collection | Summary of Cost Burdens | | | | | |
|---|-------------------------|-----------------------|-----------------------------|-----------------------------|----------------------------------|---------------------------------|
| | Type of Burden | Number of Respondents | Initial Cost per Respondent | Ongoing Cost per Respondent | Initial Cost for all Respondents | Annual Cost for all Respondents |
| Large BD and SBS Entity cost to build and implement audit trail alternative system. | Recordkeeping | 20 | \$1,000,000 | \$120,000 | \$20,000,000 | \$2,400,000 |
| Small BD cost to build and implement audit trail alternative system. | Recordkeeping | 80 | \$100,000 | \$12,000 | \$8,000,000 | \$960,000 |
| Large BD and SBS Entity cost to build and implement redundant recordkeeping system | Recordkeeping | 20 | \$250,000 | \$30,000 | \$5,000,000 | \$600,000 |

²⁶⁸ One-time initial cost for five cloud service providers: (102 hours x five cloud service providers) x \$497 per hour (at the controller hourly rate) = \$253,470.

| | | | | | | |
|---|---------------|-------|------------|------------|-------------|-------------|
| Small BD cost to build and implement redundant recordkeeping system | Recordkeeping | 80 | \$25,000 | \$3,000 | \$2,000,000 | \$240,000 |
| Third party or Designated Executive Officer Undertaking - BDs | Recordkeeping | 3,333 | \$497 | \$497 | \$1,656,501 | \$1,656,501 |
| Third party or Designated Executive Officer Undertaking – SBSDs | Recordkeeping | 19 | \$497 | \$497 | \$9,443 | \$9,433 |
| Elimination of electronic recordkeeping requirements for bank SBSDs | Recordkeeping | 17 | (\$31,600) | (\$31,600) | (\$537,000) | (\$537,000) |
| Elimination of the DEA notification requirement for BDs | Recordkeeping | 433 | (\$316) | (\$316) | (\$136,828) | (\$136,828) |
| Alternative undertaking required – BDs and SBSDs | Recordkeeping | 510 | \$497 | \$0 | \$253,470 | \$0 |
| Alternative undertaking required – cloud service providers | Recordkeeping | 5 | \$50,694 | \$0 | \$253,470 | \$0 |

E. Collection of Information is Mandatory

The collections of information pursuant to the amendments are mandatory, as applicable, for broker-dealers and SBS Entities.

F. Confidentiality of Responses to Collection of Information

A broker-dealer or SBS Entity requested by the Commission to produce records retained electronically pursuant to the requirements of Rule 17a-4 or 18a-6 can request confidential treatment of the information.²⁶⁹ If such confidential treatment request is made, the Commission anticipates that it will keep the information confidential subject to applicable law.²⁷⁰

G. Retention Period for Recordkeeping Requirements

Rule 17a-4, as amended, specifies the required retention periods for records required to be made and preserved by a broker-dealer, whether electronically or otherwise.²⁷¹ Rule 18a-6, as amended, specifies the required retention periods for records required to be made and preserved

²⁶⁹ See 17 CFR 200.83. Information regarding requests for confidential treatment of information submitted to the Commission is available on the Commission's website at <http://www.sec.gov/foia/howfo2.htm#privacy>.

²⁷⁰ See, e.g., 5 U.S.C. 552 et seq.; 15 U.S.C. 78x (governing the public availability of information obtained by the Commission).

²⁷¹ See Rule 17a-4, as amended.

by an SBS Entity, whether electronically or otherwise.²⁷² Many of the required records must be retained for three years; certain other records must be retained for longer periods.²⁷³

V. ECONOMIC ANALYSIS

The Commission is mindful of the economic effects, including the costs and benefits, of the final amendments. Section 3(f) of the Exchange Act provides that whenever the Commission is engaged in rulemaking pursuant to the Exchange Act and is required to consider or determine whether an action is necessary or appropriate in the public interest, the Commission shall also consider, in addition to the protection of investors, whether the action will promote efficiency, competition, and capital formation.²⁷⁴ In addition, Section 23(a)(2) of the Exchange Act requires the Commission, when making rules under the Exchange Act, to consider the impact such rules would have on competition.²⁷⁵ Exchange Act Section 23(a)(2) also provides that the Commission shall not adopt any rule which would impose a burden on competition that is not necessary or appropriate in furtherance of the purposes of the Exchange Act.

The analysis below addresses the likely economic effects of the final amendments, including the anticipated and estimated benefits and costs of the amendments and their likely effects on efficiency, competition, and capital formation. The Commission also discusses the potential economic effects of certain alternatives. Many of the benefits and costs discussed below are difficult to quantify. For example, the Commission cannot quantify the extent to which some broker-dealers and SBS Entities may need to upgrade existing electronic recordkeeping systems to meet the audit-trail requirement or the degree to which broker-dealers and SBS Entities may currently pass along recordkeeping costs to customers and counterparties. While the Commission has attempted to quantify economic effects where possible, much of the discussion of economic effects is qualitative in nature.

²⁷² See Rule 18a-6, as amended.

²⁷³ See Rules 17a-4 and 18a-6, as amended.

²⁷⁴ See 15 U.S.C. 78c(f).

²⁷⁵ See 15 U.S.C. 78w(a)(2).

A. Baseline

To assess the economic effects of the amendments, the Commission is using as the baseline the broker-dealer and security-based swap markets as they exist at the time of this release, including applicable rules the Commission has already adopted, but excluding rules the Commission has proposed but not yet finalized.

With respect to broker-dealers, the regulatory baseline includes Rule 17a-4(f), (i), and (j). In addition, as discussed above, the Commission has also issued interpretations of Rule 17a-4(f) for broker-dealers.²⁷⁶ With respect to SBS Entities, the regulatory baseline includes the statutory provisions pursuant to the Dodd-Frank Act and rules adopted by the Commission, compliance with which is required. This includes rules adopted by the Commission in the following adopting releases: the intermediary definitions release;²⁷⁷ cross-border release;²⁷⁸ security-based swap entity registration release;²⁷⁹ U.S. activity release;²⁸⁰ business conduct release;²⁸¹ trade acknowledgment release;²⁸² capital, margin, and segregation release;²⁸³ and the recordkeeping and reporting release adopting Rule 18a-6(e), (f), and (g).²⁸⁴

²⁷⁶ See Section II.D discussing Rule 17a-4(f) Interpretation. See *SBSD/MSBSP Recordkeeping Adopting Release*, 84 FR at 68568. As discussed in Section II.D.2, the Commission confirms that a broker-dealer or nonbank SBS Entity may rely on those interpretations with respect to meeting the WORM requirement of Rule 17a-4(f) or 18a-6(e), as amended.

²⁷⁷ See *Further Definition of “Swap Dealer,” “Security-Based Swap Dealer,” “Major Swap Participant,” “Major Security-Based Swap Participant” and “Eligible Contract Participant,”* Exchange Act Release No. 66868 (Apr. 27, 2012), 77 FR 30596 (May 23, 2012).

²⁷⁸ See *Application of “Security-Based Swap Dealer” and “Major Security-Based Swap Participant” Definitions to Cross-Border Security-Based Swap Activities*, Exchange Act Release No. 72372 (June 25, 2014, 79 FR 47278, 47359 (Aug. 12, 2014).

²⁷⁹ See *Registration Process for Security-Based Swap Dealers and Major Security-Based Swap Participants*, Exchange Act Release No. 75611 (Aug. 5, 2015), 80 FR 48964, 48989 (Aug. 14, 2015).

²⁸⁰ See *Security-Based Swap Transactions Connected With a Non-U.S. Person’s Dealing Activity That Are Arranged, Negotiated, or Executed by Personnel Located in a U.S. Branch or Office of an Agent; Security-Based Swap Dealer De Minimis Exception*, Exchange Act Release No. 77104 (Feb. 10, 2016), 81 FR 8598 (Feb. 19, 2016).

²⁸¹ See *Business Conduct Standards for Security-Based Swap Dealers and Major Security-Based Swap Participants*, Exchange Act Release No. 77617 (Apr. 14, 2016), 81 FR 29960, 30081 (May 13, 2016).

²⁸² See *Trade Acknowledgment and Verification of Security-Based Swap Transactions*, Exchange Act Release No. 78011 (Jun. 8, 2016), 81 FR 39808, 30143-44 (Jun. 17, 2016).

²⁸³ See *SBSD/MSBSP Capital, Margin, and Segregation Adopting Release*, 84 FR 43872.

²⁸⁴ See *SBSD/MSBSP Recordkeeping Proposing Release*, 84 FR 68550.

The following sections discuss available data about the security-based swap market, affected SBS Entities, dual registrants, other security-based swap market participants, participant domiciles, and broker dealer activity.

1. Broker-Dealers

The market for broker-dealer services encompasses a relatively small set of large and medium sized broker-dealers and thousands of smaller broker-dealers competing for niche or regional segments of the market. The market for broker-dealer services includes many different markets for a variety of services related to the securities business, including (1) managing orders for customers and routing them to various trading venues; (2) providing advice to customers that is in connection with and reasonably related to their primary business of effecting securities transactions; (3) holding customers' funds and securities; (4) handling clearance and settlement of trades; (5) intermediating between customers and carrying/clearing brokers; (6) dealing in corporate debt and equities, government bonds, and municipal bonds, among other securities; (7) privately placing securities; and (8) effecting transactions in mutual funds that involve transferring funds directly to the issuer.²⁸⁵ Some broker-dealers may specialize in just one narrowly defined service, while others may provide a wide variety of services.

Based on an analysis of FOCUS filings as of December 2021, there were approximately 3,508 registered broker-dealers with over 240 million customer accounts.²⁸⁶ In total, these

²⁸⁵ See *Regulation Best Interest: The Broker-Dealer Standard of Conduct*, Exchange Act Release No. 86031 (June 5, 2019), 84 FR 33318, 33406 (July 12, 2019). For simplification, the Commission presents this analysis as if the market for broker-dealer services encompasses one broad market with multiple segments, even though, in terms of competition, it could also be discussed in terms of numerous interrelated markets.

²⁸⁶ The data is obtained from FOCUS filings as of December 2021. There may be a double-counting of customer accounts among, in particular, the larger broker-dealers as they may report introducing broker-dealer accounts as well in their role as clearing broker-dealers. Customer Accounts includes both broker-dealer and investment adviser accounts for dual-registrants.

broker-dealers have over \$5 trillion in total assets as reported on Form X-17A-5.²⁸⁷ More than two-thirds of all broker-dealer assets and just under one-third of all customer accounts are held by the 21 largest broker-dealers, as shown in Table 1.²⁸⁸

Table 1. Registered Broker-Dealers as of December 2021

²⁸⁷ Assets are estimated by Total Assets (allowable and non-allowable) from Part II of the FOCUS filings (Form X-17A-5 Part II and Part IIA, *available at* https://www.sec.gov/files/formx-17a-5_2.pdf) and correspond to balance sheet total assets for the broker-dealer. The Commission does not have an estimate of the total amount of customer assets for broker-dealers because that information is not included in FOCUS filings. The Commission estimates broker-dealer size from the total balance sheet assets as described above.

²⁸⁸ Approximately \$5.26 trillion of total assets of broker-dealers (98.6%) are at broker-dealers with total assets in excess of \$1 billion.

| Size of Broker-Dealer (Total Assets) | Total Num. of BDs | Aggregate Total Assets (\$ bln) | Aggregate Number of Customer Accounts |
|---|------------------------------|--|--|
| >\$50 billion | 21 | 3,682 | 75,808,084 |
| \$1 billion to \$50 billion | 124 | 1,581 | 153,243,391 |
| \$500 million to \$1 billion | 30 | 22 | 518,545 |
| \$100 million to \$500 million | 147 | 31 | 9,559,082 |
| \$10 million to \$100 million | 532 | 19 | 128,669 |
| \$1 million to \$10 million | 1,065 | 4 | 885,269 |
| <\$1 million | 1,589 | 0.5 | 10,854 |
| Total | 3,508 | 5,338 | 240,153,894 |

The Commission estimates that 40 broker-dealers may be dually registered with the CFTC as futures commission merchants as of December 31, 2021.²⁸⁹ In addition to the above estimates of affected broker-dealers, which covers broker-dealers that are members of SROs, over-the-counter (“OTC”) derivatives dealers will also be affected by the recordkeeping amendments. The Commission estimates that seven registered OTC derivatives dealers will be impacted by the amendments to Rule 17a-4.

2. Security-Based Swap Entities

Final SBS Entity registration rules have been adopted and compliance was required as of November 1, 2021.²⁹⁰ As of April 30, 2022, there are 48 entities registered with the Commission as SBSDs, and no entities have registered as MSBSPs.²⁹¹

The numerous financial markets are integrated, often attracting the same market participants that trade across corporate bond, swap, and security-based swap markets, among others. In part, this reflects the relationship between single-name credit default swap (“CDS”) contracts, which are security-based swaps, and index CDS contracts, which may be swaps or security-based swaps. A single-name CDS contract covers default events for a single reference entity or reference security. Index CDS contracts and related products make payouts that are contingent on the default of index components and allow participants in these instruments to gain exposure to the credit risk of the basket of reference entities that comprise the index, which is a function of the credit risk of the index components. A default event for a reference entity that is an index component will result in payoffs on both single-name CDS written on the reference entity and index CDS written on indices that contain the reference entity. Because of this

²⁸⁹ Using FOCUS Report data as of December 31, 2021, there are 40 broker-dealers that report commodity futures account activity in “Part II: Customer’s Regulated Commodity Futures Accounts.”

²⁹⁰ *See Key Dates for Registration of Security-Based Swap Dealers and Major Security-Based Swap Participants*, available at <https://www.sec.gov/page/key-dates-registration-security-based-swap-dealers-and-major-security-based-swap-participants>.

²⁹¹ *See* section V.C. of this release (discussing the number of SBS Entities that would be subject to the final rules). *See also* Proposing Release, 86 FR at 68315-16 for additional information regarding the security-based swap market.

relationship between the payoffs of single-name CDS and index CDS products, prices of these products depend upon one another,²⁹² creating hedging opportunities across these markets.

These hedging opportunities mean that participants that are active in one market are likely to be active in the other. Of the 19 SBSDs subject to Rule 18a-6(e), 17 have a prudential regulator and are dually registered with the CFTC as swap dealers.²⁹³ Because these 17 SBSDs have a prudential regulator, they are not subject to paragraph (e)(2) of Rule 18a-6, which sets forth the technical requirements for electronic recordkeeping systems (including the WORM and audit trail requirements). Thus, only two SBSDs will be subject to the WORM or audit trail requirement and these SBSDs are not also registered with the CFTC.

3. Recordkeeping Practices of Market Participants

Notwithstanding the Commission's 2003 and 2019 interpretations of the WORM requirement (*i.e.*, that it can be met with software solutions) described above,²⁹⁴ the Commission understands that some affected broker-dealers maintain electronic recordkeeping systems used daily for business purposes and separate electronic recordkeeping systems used to meet the WORM requirement. The Commission does not have data regarding the number of affected broker-dealers that maintain separate electronic recordkeeping systems for these purposes or data sufficient for the Commission to evaluate the likelihood that affected broker-dealers maintain separate electronic recordkeeping systems for business purposes that do or do not satisfy the WORM requirement. As a result, the Commission cannot estimate the frequency with which separate electronic recordkeeping systems are maintained for these purposes. However, as discussed in Section IV, the Commission believes that few, if any, broker-dealers or nonbank SBSDs that use electronic recordkeeping systems are not currently compliant with the rules, as

²⁹² "Correlation" typically refers to linear relationships between variables; "dependence" captures a broader set of relationships that may be more appropriate for certain swaps and security-based swaps. *See, e.g.*, George Casella & Roger L. Berger, *Statistical Inference* 171 (2nd ed. 2002).

²⁹³ *See* section VI.F. of this release (discussing the CFTC's electronic recordkeeping rules). *See also* section V.C. of this release (discussing the number of SBSDs that would be subject to the final rules).

²⁹⁴ *See* sections I.B.1. and II.D. of this release (discussing the interpretations and broker-dealers' response to them).

amended, either because they currently use an electronic recordkeeping system that meets the WORM requirement or because they currently use one that can meet the proposed audit-trail requirement. Indeed, some broker-dealers may currently be using a modern, audit-trail compliant electronic recordkeeping system for their own business purposes while simultaneously maintaining a WORM-compliant system solely for the purpose of complying with the requirements of Rule 17a-4(f).

As discussed in Section II.I, the Commission understands that broker-dealers themselves may need to have access to – and the ability to read – their own records retained by means of an electronic recordkeeping system. Thus, most, if not all, broker-dealer electronic records are produced in a human readable and reasonably usable electronic format.

The Commission understands that third-party vendors developed software-based solutions designed to meet the WORM requirement of Rule 17a-4(f).²⁹⁵ However, affected broker-dealers do not commonly use such record systems for business purposes: broker-dealers have explained to Commission staff that the electronic recordkeeping systems used for business purposes are dynamic, updated constantly (*e.g.*, with each new transaction or position), and easily accessible for retrieving records, whereas WORM databases are more akin to static “snapshots” of the records at a point in time and are less accessible for business purposes. As discussed in Section II.D.2 above, the Commission believes that affected broker-dealers generally deploy an electronic recordkeeping system that serves no purpose other than to hold records in a manner that meets the Commission’s regulatory requirements for electronic recordkeeping systems.²⁹⁶ The Commission also believes that some affected SBS Entities

²⁹⁵ See, *e.g.*, 17a-4, LLC Letter; NCC Group Letter; RegEd Letter.

²⁹⁶ See section II.D of this release (discussing broker-dealers’ use of WORM compliant electronic recordkeeping systems).

currently have systems complying with the electronic recordkeeping requirements under Rule 18a-6 as it presently stands, which does not include a WORM or audit-trail requirement.²⁹⁷

The Commission understands that, as discussed above, some broker-dealers and SBS Entities maintain their electronic recordkeeping systems and associated electronic records on servers or other storage devices that are owned or operated by third parties (*e.g.*, cloud service providers), while the broker-dealer or SBS Entity retains control of the electronic recordkeeping system and access to the electronic records preserved on the system. The Commission understands that such arrangements are commonly governed by contractual agreements between broker-dealers or SBS Entities and their cloud service providers. Under Rules 17a-4 and 18a-6, third parties who prepare or maintain the regulatory records of a broker-dealer or SBS Entity are required to file a written undertaking with the Commission. The undertaking must include a provision whereby the third party agrees, among other things, to permit examination of the records by representatives or designees of the Commission as well as to promptly furnish to the Commission or its designee true, correct, complete, and current hard copies of any or all or any part of such books and records.

Finally, as discussed in Section V.A.2 above, a number of affected entities are dually registered with the CFTC as swap dealers. Under the CFTC's electronic recordkeeping rule, affected entities must configure their recordkeeping systems and have policies and procedures governing those systems that are designed to prevent records from being altered or erased.

B. Benefits of the Amendments

The amendments are intended to modernize the SBS Entity and broker-dealer recordkeeping rules given technological changes over the last two decades and the Commission has received a number of comments in support of the benefits of these amendments.²⁹⁸ The

²⁹⁷ As noted above in section II.D. of this release, it is the Commission's understanding that electronic recordkeeping systems used by nonbank SBS Entities as well as by broker-dealers for business purposes can be configured to meet the audit-trail requirement.

²⁹⁸ *See, e.g.*, NCC Group Letter, LPL Financial Letter, American Fund Distributors Letter.

Commission continues to believe that by specifying that nonbank SBS Entities²⁹⁹ and broker-dealers may satisfy their electronic recordkeeping obligations through the WORM requirement or an audit-trail alternative, the amendments may result in nonbank SBS Entities or broker-dealers updating electronic recordkeeping systems in ways that would lower compliance costs. For example, nonbank SBS Entities or broker-dealers may, among other things, reduce or eliminate duplicative compliance systems in circumstances where they currently maintain separate electronic recordkeeping systems primarily due to, as applicable, the WORM requirement or Rule 18a-6(e)'s electronic storage system requirements. The Commission expects that these reductions would primarily be realized by broker-dealers that may, for example, choose to adopt a single recordkeeping system that complies with the audit-trail requirement—for business *and* regulatory purposes. Below, the Commission estimates the reduction in initial and ongoing costs and burdens related to these amendments.³⁰⁰

These aggregate cost savings may be reduced by three factors. First, some affected entities may have already streamlined their regulatory electronic recordkeeping systems with systems used for business records consistent with the Commission interpretations described above. Second, some affected entities may elect to upgrade existing business recordkeeping systems to accommodate the audit-trail alternative. The affected entities that choose to undertake such upgrades may do so if aggregate savings from eliminating redundant electronic recordkeeping systems outweigh the costs of buildout for existing systems. The Commission expects that these costs would primarily be realized by broker-dealers. However, potential buildout costs may decrease the cost savings from the amendments. Third, because the

²⁹⁹ With respect to SBS Entities, the final amendments would limit the electronic recordkeeping requirements to SBS Entities that do not have a prudential regulator in order to avoid subjecting bank SBS Entities to potentially differing requirements with respect to electronic record preservation. As discussed above, 17 of 19 SBS Entities subject to Rule 18a-6 have a prudential regulator (*i.e.*, are bank SBS Entities). The exclusion of bank SBS Entities from the scope of the electronic recordkeeping system requirements would reduce aggregate benefits and costs related to modifying electronic recordkeeping systems to conform to the amendment to paragraph (e)(2) of Rule 18a-6.

³⁰⁰ See section V.D. of this release (discussing increases and decreases in costs and burdens relating to the amendments for purposes of the Paperwork Reduction Act).

amendments would not require broker-dealers to make changes to recordkeeping systems that are currently compliant with the WORM requirement, they may choose not to make any changes to recordkeeping systems. Such broker-dealers may, for example, choose to continue maintaining separate recordkeeping systems for business purposes and for regulatory purposes.

The amendments may also benefit customers and counterparties of broker-dealers and nonbank SBS Entities. Specifically, to the extent that broker-dealers and nonbank SBS Entities currently pass on part or all of their recordkeeping costs to their customers and counterparties, some of the above cost savings may flow through to customers and counterparties of broker-dealers and nonbank SBS Entities in the form of lower costs or greater availability of services. The extent to which cost savings are passed along to customers and counterparties will depend on several factors, including the price elasticity of the demand for broker-dealer and nonbank SBS Entity services, the substitutability of broker-dealers and nonbank SBS Entities, concentration in the broker-dealer and nonbank SBS Entity industries due to economies of scale, heterogeneity of broker-dealer and nonbank SBS Entity services, and market segmentation, among others.

The amendments may also enhance Commission oversight of broker-dealers and nonbank SBS Entities. To the degree that the amendments may lead broker-dealers and nonbank SBS Entities to move to a single recordkeeping system for both business and regulatory purposes, and if affected entities direct compliance cost savings to investments in system improvements and maintenance, the reliability and efficiency of recordkeeping systems may increase. Moreover, the Commission believes that the audit-trail and WORM alternatives will provide flexibility for broker-dealers and nonbank SBS Entities, while still maintaining the essential ability of the Commission to access the entities' records in the course of examinations or other activities.

The Commission believes that some of the amendments may provide compliance efficiencies. For example, the amendments related to the verification of completeness and accuracy of the processes for retaining records electronically may introduce time efficiencies in

achieving compliance when an original record is added to the electronic recordkeeping system. Further, the Commission believes that the elimination of the notification and representation requirements from Rule 17a-4(f) would alleviate some burden currently imposed on broker-dealers, as discussed below.³⁰¹

The proposing release would have eliminated the *third-party* access and undertakings requirements and would have replaced them with a senior officer undertakings requirement. In the proposing release, the Commission indicated that the removal of the third party undertaking was expected to benefit affected entities by reducing cybersecurity and trade-secret risks attendant to requiring a third party to fulfill these responsibilities.³⁰² The Commission also expected that senior officer undertakings could enhance the efficiency of Commission examinations and oversight.

However, some commenters stated that the third party undertakings requirement facilitates regulatory access to records and creates incentives for full cooperation from broker-dealers by providing an alternative and independent means to access records.³⁰³ Another commenter indicated that the third party undertakings requirement benefits affected entities by resulting in meetings between compliance and IT teams that improve broker-dealer understanding of how electronic records are retained, accessed, and disposed of, among others.³⁰⁴ The Commission has also received comment recommending that the Commission preserve a third party undertaking as an option for affected entities in the event a third party is maintaining records on behalf of the firm.³⁰⁵ Moreover, other commenters pointed to benefits of allowing more than one senior officer to complete the undertakings³⁰⁶ and of allowing designation or

³⁰¹ See section V.D. of this release (discussing increases and decreases in costs and burdens relating to amendments for purposes of the Paperwork Reduction Act).

³⁰² See Proposing Release, 86 FR at 68317.

³⁰³ See NCC Group Letter.

³⁰⁴ See 17a-4, LLC Letter.

³⁰⁵ See RegEd Letter.

³⁰⁶ See Fidelity Letter; NRS Letter; RegEd Letter; SIFMA Letter.

delegation of responsibility.³⁰⁷ Specifically, commenters pointed to the need to provide flexibility around personnel relocations, vacation scheduling, succession planning, and technical expertise residing in personnel other than senior officers.³⁰⁸

As discussed in Section II.E.6, the final amendments would allow affected entities to produce third party undertakings as an alternative to the senior officer undertakings, and would allow the designated executive officer to appoint in writing up to two employees and three specialists to assist in fulfilling the officer's obligations. This aspect of the final amendments may provide beneficial flexibility to affected entities in organizing their compliance, and may facilitate reliable and efficient Commission access to relevant records, particularly for affected entities that are members of large and complex financial groups.³⁰⁹

Moreover, as described in Section II.G, the final amendments would allow affected broker-dealers and security-based swap dealers to have certain third parties execute an Alternative Undertaking in lieu of the Traditional Undertaking, under certain conditions. The Commission believes that this aspect of the final amendments may better account for how cloud service providers maintain records for broker-dealers and SBS Entities. Thus, this aspect of the final amendments may enable broker-dealers and SBS Entities to continue to rely on cloud service provider services in the regular course of business and regulatory recordkeeping. Moreover, the Commission believes that this aspect of the final amendments may promote access of electronic records by the Commission and other securities regulators, as well as trustees appointed under SIPA, for broker-dealers and SBS Entities that maintain records with cloud

³⁰⁷ See American Funds Distributors Letter; ICE Bonds Letter; SIFMA Letter.

³⁰⁸ See American Funds Distributors Letter; SIFMA Letter.

³⁰⁹ As discussed in Part II.G., under existing Rules 17a-4 introductory text and (i) and 18a-6(f), a contract with a third-party record provider may not permit the provider to withhold, delete, discard, or prevent remote access to an affected entity's records in the event of a payment dispute or other contractual dispute. Since these requirements are already part of the regulatory baseline for third-party record providers subject to the new provisions for alternative undertakings (such as cloud service providers), the rule change is not expected to add new burdens. In addition, to the degree that nonpayment or other contractual disputes between third-party record providers and their clients can hinder Commission access to records, the designated executive undertaking provision may further enhance Commission access to records of affected entities.

service providers. Overall, the Commission expects that the final amendments may enhance Commission oversight and examinations of broker-dealers and SBS Entities.

Other final amendments may also incrementally improve regulatory oversight or reduce cybersecurity risk. For example, amendments related to the ability to download and transfer records in human readable and reasonably usable electronic formats may facilitate more efficient Commission oversight as they would reduce the time costs of staff review of individual records as well as searching and sorting electronic records. In addition, the elimination of the escrow account option may reduce cybersecurity risk attendant to having this information held by a third party in escrow.³¹⁰

C. Costs of the Amendments

The amendments are intended to modernize the Commission's recordkeeping requirements and to reduce recordkeeping duplication by affected entities. However, the amendments may result in both direct costs arising out of the final rule (*e.g.*, compliance costs for non-bank SBS Entities altering their electronic systems to comply with either the audit-trail or the WORM requirement), as well as indirect costs that registrants may choose to bear in order to achieve greater compliance efficiencies (*e.g.*, broker-dealers may need to build new or alter existing WORM-compliant electronic recordkeeping systems to the extent they would like to meet the audit-trail alternative). Thus, under the final amendments, broker dealers would have to choose whether to continue using their baseline WORM-compliant systems or to upgrade their systems to comply with the audit trail alternative. Importantly, broker dealers may be incentivized to upgrade their WORM-compliant systems if they face high baseline costs of compliance duplication and expect to achieve greater compliance efficiencies from switching to

³¹⁰ The Commission does not expect significant benefits or costs associated with certain other amendments that the Commission believes are technical in nature. These amendments include simplification of the introductory text of paragraph (f)(3) of Rule 17a-4 and paragraph (e)(3) of Rule 18a-6; amendments to paragraph (f)(3)(i) of Rule 17a-4 and paragraph (e)(3)(i) of Rule 18a-6 to replace terms tied to micrographic media and optical disk technology; amendments to better clarify paragraph (f)(3)(ii) of Rule 17a-4 and paragraph (e)(3)(ii) of Rule 18a-6; and amendments moving the requirements for broker-dealers using micrographic media to new paragraph (f)(4) of Rule 17a-4.

the audit-trail alternative. Thus, some of the costs discussed above may be mitigated by the savings from the elimination of duplicative recordkeeping and greater compliance efficiencies for broker-dealers that choose to upgrade their systems to comply with the audit-trail alternative.

Section IV estimates the initial and ongoing compliance costs arising out of the final amendments.³¹¹ As estimated in Section IV, the initial cost to build and implement a WORM-compliant electronic recordkeeping system for a large broker-dealer is \$10 million, with an additional cost of \$1.2 million annually to maintain the system,³¹² and the Commission believes that the SBS Entities that would be affected by the amendments are of large sizes comparable to the universe of broker-dealers that the rulemaking petitioners used to derive those estimates. In addition, as discussed in Section IV, the Commission believes that the initial cost to build and implement an electronic recordkeeping system that meets the audit-trail requirements and the ongoing cost to maintain the system would be substantially lower than the analogous costs that would be incurred with respect to a WORM-compliant system.³¹³ In particular, the Commission estimates that the initial cost to build and implement an electronic recordkeeping system that meets the audit-trail requirement for a large broker-dealer or SBS Entity without a prudential regulator and that is not a broker-dealer is \$1,000,000, with an additional cost of \$120,000 annually to maintain the system.

There are 854 broker-dealers with assets of \$10 million or more and two SBSDs that would be subject to paragraph (e)(2) of Rule 18a-6. The Commission anticipates that eliminating the application of the technical requirements for electronic recordkeeping systems set forth in paragraph (e)(2) of Rule 18a-6 to the 17 SBSDs that have a prudential regulator and are subject to Rule 18a-6 would result in a decrease of 100 hours per firm on an annual basis, or 1,700 hours per year for all firms affected by the amendment, for an ongoing cost savings of

³¹¹ See section V.D. of this release (discussing decreases and increases in costs and burdens relating to the amendments for purposes of the Paperwork Reduction Act).

³¹² See Rule 17a-4(f) Rulemaking Petition Addendum at 4-5.

³¹³ See, e.g., Rule 17a-4(f) Rulemaking Petition at 6-7.

\$537,000 per year for all affected firms.³¹⁴ Further, the elimination of the DEA notification requirement may decrease ongoing costs by \$136,828 per year for the industry.

As discussed in Section IV.D, the Commission does not believe any broker-dealers or SBSBs will elect to build a WORM-compliant electronic recordkeeping system. Moreover, the Commission estimates that most of these firms have electronic recordkeeping systems that could meet the audit-trail requirement or that could be configured to meet that requirement without the need to build a new system. The Commission estimates that 20 of these firms would elect to modernize their recordkeeping by building a new electronic recordkeeping system to meet the audit-trail requirement for an initial one-time industry cost burden of \$20,000,000 and an annual cost burden of \$2,400,000.

The Commission estimates that the cost for the 2,654 broker-dealers with less than \$10,000,000 in total assets to build and maintain an electronic recordkeeping system that meets the final audit-trail requirement would be significantly less than the \$1,000,000 initial and \$120,000 annual costs estimated for the 854 larger broker-dealers and two SBSBs that would be subject to paragraph (e)(2) of Rule 18a-6. Consequently, the Commission estimates that the initial cost to build and implement an electronic recordkeeping system that meets the audit-trail requirement for these smaller broker-dealers is \$100,000, with an additional cost of \$12,000 annually to maintain the system. The Commission estimates that most of the 2,654 broker-dealers with \$10,000,000 or less in total assets will continue to preserve records in the manner they do today: using a WORM-compliant system, using micrographic media, or maintaining paper records. As estimated in Section IV, 80 of these firms would elect to build a new electronic recordkeeping system to meet the audit-trail requirement for an initial one-time industry cost burden of \$8,000,000 and an annual cost burden of \$960,000.

³¹⁴ 1,700 hours x \$316 per hour (at the compliance manager rate) = \$537,000.

The Commission believes that broker-dealers and SBS Entities would incur an initial burden and ongoing annual burden in establishing a backup electronic recordkeeping system or other redundancy capabilities. The Commission believes these burdens and costs would be substantially less than the burdens and costs of the primary electronic recordkeeping systems because of the benefit of economies of scale for the backup system whereby common technology and personnel could be used for both systems. The Commission estimates that the costs and burdens for the 854 larger broker-dealers subject to paragraph (f)(2) of Rule 17a-4 and the two SBSDs that would be subject to paragraph (e)(2) of Rule 18a-6 would be \$250,000 in initial burdens and costs and \$30,000 in annual burdens and costs. Further, the Commission expects that the broker-dealers and SBS Entities that have electronic recordkeeping systems that could meet the audit-trail requirement or that could be configured to meet that requirement without the need to build a new system also maintain backup recordkeeping systems or other redundancy capabilities. Therefore, the initial and annual costs would be incurred by the 20 firms that elect to build a new electronic recordkeeping system that meets the final audit-trail requirements. Consequently, the Commission estimates that the industry-wide costs and burdens for these firms would be \$5,000,000 in initial costs and burdens and \$600,000 in annual costs and burdens.

The Commission estimates that the costs and burdens incurred by the 80 smaller broker-dealers that would build electronic recordkeeping systems to meet the audit-trail requirement and, therefore, need to build a backup recordkeeping system or other redundancy capabilities, would be substantially less than the costs and burdens incurred by the larger broker-dealers due to the smaller size and complexity of recordkeeping systems of smaller broker-dealers. As discussed in Section IV.D, the Commission estimates that these firms would incur an initial costs and burdens of \$25,000 and ongoing annual costs and burdens of \$3,000. Therefore, the Commission estimates that the industry-wide costs and burdens for these firms would be \$2,000,000 in initial costs and burdens and \$240,000 in ongoing annual costs and burdens.

In addition, Rule 18a-6(e) does not contain a third-party undertakings requirement; however, the amendments to the rule add a requirement that either a Designated Third Party or a Designated Executive Officer complete the access and undertakings requirements in a manner analogous to the requirements of Rule 17a-4(f), as amended. As discussed in Section IV, this change, and, in the case of SBSDs, the addition of a senior officer or third-party undertakings requirement, will result in a one-time initial cost of \$1,656,501 under Rule 17a-4(f) and of \$9,443 for SBSDs under Rule 18a-6(e).

The Commission recognizes that the amendments would not harmonize with the parallel recordkeeping rule for CFTC registrants (*e.g.*, futures commission merchants and swap dealers). In contrast, the amendments impose a bright line audit-trail or WORM requirement. The Commission has received comment that the audit-trail alternative is not “technology-neutral” and may reduce the ability for firms to implement future technological innovations or advancements.³¹⁵ However, as discussed in Section II.D, the audit-trail alternative is an option that affected entities may choose to rely on in lieu of the baseline WORM-compliant electronic recordkeeping systems. Importantly, the technical requirements in the final amendments related to the system having the capacity to recreate an original record if it is modified or deleted were designed to prevent records from being altered, over-written, or erased. The Commission believes that a principles-based approach that harmonizes with the CFTC would rely on the broker-dealer or SBS Entity to establish appropriate systems and controls that ensure the authenticity and reliability of regulatory records without specifying that the systems and controls must permit the recreation of an original record if it is modified or deleted. As discussed in Section II.D.2, the Commission continues to believe that providing the option to preserve records using an electronic recordkeeping system that complies with the audit-trail requirement appropriately addresses concerns about the WORM requirement while meeting the objective of

³¹⁵ See, *e.g.*, Committee of Annuity Insurers Letter, FSI Letter, NRS Letter.

preserving electronic records in a manner that protects the authenticity and reliability of original records. However, the Commission recognizes that a lack of harmonization in the recordkeeping requirements for certain registrants may give rise to compliance inefficiencies for those broker dealers and SBS Entities that are dually registered with the CFTC.

Certain other aspects of the amendments may also impose costs on affected entities. Specifically, the amendments related to human readable and reasonably usable electronic file formats may impose compliance costs related to the required updates to recordkeeping systems.³¹⁶ Further, amendments requiring broker-dealers and SBS Entities to have a backup set of records or have other redundancy capabilities when records are preserved on an electronic recordkeeping system may impose additional costs related to making updates to compliance systems, as compared to the current rules' requirements to store separately from originals a duplicate copy of a record.³¹⁷ The designated executive officer undertakings requirements may impose additional time demands on senior officers, though these costs may be at least partially offset for broker-dealers by savings attendant to removing the requirement for third-party access. To the extent that these requirements increase the scope of senior officer duties and increase potential liability on the part of senior officers, senior officers may demand higher compensation and liability insurance, which may result in an increase to senior officer recruitment and retention costs. Two important factors may reduce these costs. First, the final amendments would provide valuable flexibility in carrying out the designated executive officer undertakings, as discussed in Section II above. Second, affected entities, for which the above costs of the designated executive officer

³¹⁶ See section V.D. of this release (discussing increases and decreases in costs and burdens relating to the amendments for purposes of the PRA).

³¹⁷ The Commission does not expect significant costs associated with certain other final amendments, including amendments to eliminate the notification and representation requirements from Rule 17a-4(f); amendments to eliminate the escrow account option from paragraph (f)(3)(vi) of Rule 17a-4 and paragraph (e)(3)(vi) of Rule 18a-6; and amendments to the requirements of paragraph (f)(2)(ii)(B) of Rule 17a-4 and paragraph (e)(2)(i) of Rule 18a-6 to provide additional specificity regarding the requirement that original records are completely and accurately captured.

undertakings are highest, may continue to rely on third party undertakings that are already required under the baseline.

Moreover, as discussed in Section II, the final amendments would allow affected broker-dealers and SBS Entities to have certain third parties execute an Alternative Undertaking in lieu of the Traditional Undertaking, under certain conditions. As discussed in Section IV, 500 of the broker-dealers and 10 of the SBSs that currently employ cloud service providers for electronic recordkeeping purposes will be required to obtain the Alternative Undertaking from the third-party cloud service provider (*i.e.*, an undertaking tailored to how cloud service providers hold electronic records for broker-dealers and SBSs) discussed above. This requirement would impose costs on broker-dealers and cloud service providers: as estimated in Section IV, five different cloud service providers will need to execute these 510 Alternative Undertakings and 510 broker-dealers will need to obtain the undertakings from the cloud service providers. The need for cloud service providers to review and execute the Alternative Undertaking is expected to result in an initial cost of \$253,470 for cloud service providers and \$253,470 for broker-dealers.³¹⁸

The Commission recognizes that cloud service providers may pass along some or all of these costs, directly or indirectly, to broker-dealers and SBS Entities that utilize cloud service providers, which may increase costs of electronic recordkeeping. The Commission cannot quantify the extent to which individual broker-dealers and SBS Entities may experience such cost increases as that will depend on a number of factors, including, among others, the willingness of cloud service providers to pass on costs to other customers, competition by cloud service providers for covered entity clients, new entry in the market for cloud services (potentially reducing the cost per provider), broker-dealer and SBS Entity size (potentially affecting their bargaining power), information-sharing in the industry on standard-form

³¹⁸ One-time initial cost for five cloud service providers: (102 hours x five cloud service providers) x \$497 per hour (at the controller hourly rate) = \$253,470. And one-time initial cost for broker-dealers and SBSs: 510 hours x \$497 per hour (at the controller hourly rate) = \$253,470.

agreements, and the profitability of cloud services. In addition, some affected entities that may experience increases in costs of third party services may choose to reduce their reliance on third party service providers.

However, as discussed above, the conditions for the Alternative Undertaking are intended to enhance access to broker-dealer and SBS Entity records. The Commission continues to believe that Commission access to the records of a broker-dealer or an SBS Entity for examinations is essential for the protection of customers and investors.

D. Reasonable Alternatives

The Commission has considered a number of alternatives. First, the Commission has considered harmonizing the recordkeeping rules for SBS Entities with the CFTC's principles-based approach applicable to Swap Dealers, but retaining the final audit-trail requirement for broker-dealers.

This alternative could help harmonize the treatment of cross-registered Swap and SBS Entities, facilitating transactions across integrated markets, while retaining the requirement that broker-dealers are able to produce originals of deleted or altered records. However, because prudentially regulated SBS Entities would not be subject to the technical requirements governing electronic recordkeeping systems, to benefit from this alternative, the SBS Entity would have to be registered as a swap dealer and not be registered as a broker-dealer or have a prudential regulator. Currently, only two SBSDs fit within this category, and they are subject to the CFTC's electronic recordkeeping requirements through application of the alternative compliance mechanism. Moreover, this alternative would create a wedge between single-name CDS markets intermediated by SBS Entities and markets for reference entity securities intermediated by broker-dealers. Importantly, costs of the final amendments are likely to be low relative to the costs of maintaining duplicate systems under the baseline. Thus, the relative magnitude of such economic effects may be limited.

Second, the Commission considered harmonizing recordkeeping rules for both broker-dealers and SBS Entities with the CFTC's principles-based approach.³¹⁹ This alternative could help harmonize the treatment of Swap Dealers and SBS Entities that are also broker-dealers. However, as discussed in Section II.D.2, this alternative would require the broker-dealer or SBS Entity to establish systems and controls that ensure the authenticity and reliability of regulatory records without specifying that the systems and controls must permit the recreation of an original record if it is modified or deleted. The Commission continues to believe that the audit-trail requirement provides the flexibility of a principles-based requirement by setting forth a high-level yet specific outcome the electronic recordkeeping system must achieve – the ability to recreate an altered or deleted record – without prescribing how the system must be configured to meet that objective.

Third, the Commission could require prudentially regulated SBS Entities to meet the electronic recordkeeping system requirements. This alternative would expand the scope of application of the requirements, magnifying its benefits for Commission oversight as well as costs of altering existing recordkeeping systems. As a baseline matter, the Commission recognizes that prudentially regulated SBS Entities are subject to a robust system of recordkeeping requirements for different types of activities, including recordkeeping requirements under the Bank Secrecy Act regarding funds transfers equal to or greater than \$3,000;³²⁰ recordkeeping requirements regarding fiduciary accounts;³²¹ recordkeeping requirements for securities transactions;³²² and recordkeeping requirements for small business and farm loans, including a requirement to maintain the information in machine readable form.³²³ Importantly, as discussed above, the Commission believes that the final rule's requirements may

³¹⁹ See, e.g., Proposing Release, 86 FR at 68302.

³²⁰ See, e.g., 31 CFR 1020.410.

³²¹ See 12 CFR 9.8.

³²² See 12 CFR 12.3.

³²³ See 12 CFR 25.42.

conflict or overlap with the recordkeeping systems banks have implemented under regulations or guidance of the prudential regulators. The Commission believes that requiring prudentially regulated SBS Entities to meet the final electronic recordkeeping system requirements (in addition to the recordkeeping requirements these entities are already subject to) would not create significant incremental benefits.

Fourth, the Commission could have eliminated the WORM alternative and required all broker-dealers and nonbank SBS Entities to comply with an audit-trail requirement. This alternative would require all affected entities to modernize their recordkeeping systems to meet the audit-trail requirement. While this alternative could produce long-term compliance efficiencies for a greater number of affected participants, it would also require all affected entities with WORM compliant systems to upgrade their electronic recordkeeping systems. Since compliance costs may be particularly burdensome for smaller entities, the alternative could have a disproportionate effect on smaller and medium-sized broker-dealers.

As another alternative, the Commission could have required that a second Designated Executive Officer have independent access to and the ability to provide the records and to execute the undertakings at all times. To the degree that relying on a single Designated Executive Officer may present risks that the senior officer is unable or unwilling to obtain records, this alternative could increase the probability that the Commission would be able to access records. Thus, relative to the final amendments, the alternative may further enhance the efficiency of Commission examinations and oversight. However, the final amendments would allow a Designated Executive Officer to appoint other officers and specialists to fulfil their obligations, under the conditions described above, ensuring that the Commission has access to relevant records for purposes of examinations and oversight. At the same time, this alternative may impose additional time demands on a second Designated Executive Officer in each affected entity. To the extent that the alternative would increase the scope of duties and increase potential liability on the part of a greater number of executive officers of affected entities, more executive

officers may demand higher compensation and liability insurance, which may result in a greater increase to executive officer recruitment and retention costs relative to the final amendments.

The final amendments could have harmonized the compliance date for all affected broker-dealers and SBS Entities.³²⁴ As a related alternative, the Commission could have set the compliance date for the amendments to Rules 17a-4 and 18a-6 at 18 months after publication of the amendments in the **Federal Register**. Relative to the approach being adopted, these alternatives would have given affected broker-dealers and SBS Entities more time to comply with amended rules, including developing audit trail compliant recordkeeping systems. Since broker-dealers are already required to have WORM-compliant recordkeeping systems and because, under the final rule, the audit trail is an alternative to such systems, this benefit may be greater for SBS Entities, which are not currently subject to WORM requirements. Thus, under the final rule, broker-dealers would be able to continue to use their existing WORM-compliant recordkeeping systems for regulatory compliance and may transition to audit-trail compliant systems over time. As discussed above, the Commission believes that SBS Entities may generally elect to configure existing electronic recordkeeping systems, rather than develop new systems, in order to come into compliance with the final rules. Based on staff experience and given the relative size and sophistication of SBS Entities, the Commission believes that twelve months after publication in the **Federal Register** will be sufficient time for SBS Entities to come into compliance with these new requirements. Moreover, while the Commission acknowledges commenters' request for an 18-month compliance period, it does not believe that the timing concerns raised require more than a twelve month compliance period. In addition, the Commission believes that the twelve-month compliance period may help enhance Commission oversight and examinations, while the audit-trail and WORM alternatives may provide flexibility for broker-dealers and nonbank SBS Entities.

E. Effects on Efficiency, Competition, and Capital Formation

³²⁴

See SIFMA Letter.

The primary effect of the amendments on efficiency would stem from increased efficiency of broker-dealer and SBS Entity recordkeeping. Permitting either the audit-trail or WORM (introduced in the optical disk era) alternative is intended to allow broker-dealers and SBS Entities to modernize the records and systems such entities maintain for regulatory purposes. The Commission anticipates that most of the affected entities would respond to such a requirement by eliminating duplicative recordkeeping for regulatory and business purposes, giving rise to cost efficiencies discussed above. The amendments would not alter the amount, type, or manner of disclosures available to investors or the Commission, nor would it change broker-dealer or SBS Entity business models or activities. Thus, the Commission does not anticipate the amendments to impact informational or allocative efficiency.

The amendments are not expected to significantly impact competition between bank and nonbank SBS Entities. As described above, the amendments would impose electronic recordkeeping system requirements (including the audit-trail alternative) on nonbank SBS Entities, but not on bank SBS Entities. Transitioning regulatory recordkeeping systems from hardware solutions (such as optical disks) meeting the WORM requirement to electronic records compliant with the audit-trail requirement may require costly modifications to existing recordkeeping systems of broker-dealers and nonbank SBS Entities may need to modify existing electronic recordkeeping systems to meet either the WORM or audit-trail requirement; bank SBS Entities would not bear such costs.

To the extent that the amendments result in cost savings for broker-dealers and SBS Entities estimated above, affected entities may be able to allocate newly available capital into capital forming activities. However, it is not clear that affected entities would direct cost savings to expanding their financial intermediation business and given the magnitude of the cost savings estimated above, the capital formation effects of the amendments are likely limited. Therefore, the amendments are also not expected to have significant effects on capital formation.

VI. REGULATORY FLEXIBILITY ACT

The Regulatory Flexibility Act (“RFA”) requires that Federal agencies, in promulgating rules, consider the impact of those rules on small entities.³²⁵ Section 3(a) of the RFA³²⁶ generally requires the Commission to undertake a regulatory flexibility analysis of all proposed rules to determine the impact of such rulemaking on small entities unless the Commission certifies that the rule amendments, if adopted, would not have a significant economic impact on a substantial number of small entities.³²⁷ In the proposing release, the Commission performed an initial regulatory flexibility analysis and sought comment on the analysis.³²⁸ The Commission did not receive any comments on the analysis.

A. Reasons for, and Objectives of, the Final Action

The final amendments to Rules 17a-4 and 18a-6 are designed to modernize the electronic recordkeeping requirements for broker-dealers and SBS Entities, and to align the requirements in those rules more closely to the current electronic recordkeeping practices of broker-dealers and SBS Entities.

Rule 17a-4 currently requires a broker-dealer to notify its DEA before employing an electronic recordkeeping system.³²⁹ The amendments to the rule eliminate this requirement as outdated.³³⁰ In particular, this requirement is no longer necessary because the rule was adopted at a time when the use of electronic recordkeeping systems by broker-dealers to meet the record maintenance and preservation requirements of Rule 17a-4 was a relatively new phenomenon, and the staff of DEAs, including FINRA, now have substantial experience and familiarity with the topic.

³²⁵ 5 U.S.C. 601 *et seq.*

³²⁶ 5 U.S.C. 603.

³²⁷ 5 U.S.C. 605(b).

³²⁸ *See* Proposing Release, 86 FR at 68324-25.

³²⁹ Rule 18a-6 does not have a similar requirement.

³³⁰ *See* section II.C. of this release (discussing these amendments in more detail).

Rule 17a-4 currently requires a broker-dealer to maintain and preserve electronic records exclusively in a WORM format. The amendments to Rule 17a-4 add an audit-trail alternative to the WORM requirement.³³¹ Under the audit-trail alternative, a broker-dealer will need to use an electronic recordkeeping system that maintains and preserves electronic records in a manner that permits the recreation of an original record if it is modified or deleted. Currently, Rule 18a-6 does not require an SBS Entity to use an electronic recordkeeping system that meets either the audit-trail or the WORM requirement. The amendments to Rule 18a-6 require a nonbank SBS Entity to maintain and preserve electronic records using an electronic recordkeeping system that meets either the audit-trail or the WORM requirement.³³² Thus, under the amendments to Rules 17a-4 and 18a-6, a broker-dealer and a nonbank SBS Entity will need to use an electronic recordkeeping system that meets either the audit-trail requirement or the WORM requirement. The Commission believes that the amendments – by adding the audit-trail alternative – will save many broker-dealers and nonbank SBS Entities from the burden of maintaining and preserving records on an electronic recordkeeping system that serves no function other than to comply with the WORM requirement. The audit-trail alternative will permit them to leverage the electronic recordkeeping systems they use for business purposes to meet the record maintenance and preservation requirements of Rules 17a-4 and 18a-6.

Rule 17a-4 currently requires a broker-dealer to engage a third party who has access to and the ability to download information from the broker-dealer's electronic storage media to any acceptable medium under the rule. The Designated Third Party must execute written undertakings agreeing to, among other things, furnish promptly to the Commission and other securities regulators the information necessary to download information kept on the electronic storage media to any medium acceptable under Rule 17a-4. The amendments to Rule 17a-4 modify the form of the undertakings to make them more technology neutral and to provide an

³³¹ See section II.D.2. of this release (discussing these amendments in more detail).

³³² *Id.*

alternative to engaging a Designated Third Party to perform this function.³³³ Under the alternative, the broker-dealer can have a Designated Executive Officer execute the undertakings if the Designated Executive Officer has access to and the ability to provide records maintained and preserved on the broker-dealer's electronic recordkeeping system either directly or through a specialist who reports directly or indirectly to the executive officer. Further, the Designated Executive Officer can appoint in writing up to two employees who are direct or indirect reports to fulfill the executive officer's obligations if the executive officer is unavailable. The employees must have the same ability as the executive officer to access and provide the records either directly or through a specialist who reports directly or indirectly to them. In addition, the Designated Executive Officer can appoint in writing up to three specialists to assist in fulfilling the executive officer's obligations. Rule 18a-6 currently does not have either a third-party or executive officer undertakings requirement. The amendments to Rule 18a-6 add the third-party undertakings requirement and alternative executive officer undertakings requirement to the rule.³³⁴ Thus, under the amendments to Rules 17a-4 and 18a-6, a broker-dealer and an SBS Entity must have either a third party or an executive officer provide the written undertakings.

These amendments are designed to promote the ability of the Commission and other securities regulators in accessing broker-dealer or SBS Entity records stored electronically. Further, by retaining the Designated Third Party alternative, broker-dealers will be able to use their existing Designated Third Parties if they choose not use the Designated Executive Officer option. In addition, by adding the Designated Executive Officer option, broker-dealers and SBS Entities will be able to avoid the costs of using a Designated Third Party. This option also will address data leakage and cybersecurity concerns with giving a Designated Third Party access to information necessary to view and download records stored electronically.

³³³ See section II.E.6. of this release (discussing these amendments in more detail).

³³⁴ *Id.*

Rules 17a-4 and 18a-6 require a third party who prepares or maintains the regulatory records of a broker-dealer or SBS Entity (regardless of whether the records are in paper or electronic form) to file a written undertaking with the Commission signed by a duly authorized person.³³⁵ The undertaking must include a provision whereby the third-party agrees, among other things, to permit examination of the records by representatives or designees of the Commission as well as to promptly furnish to the Commission or its designee true, correct, complete, and current hard copies of any or all or any part of such books and records. Some broker-dealers and SBS Entities maintain their electronic recordkeeping systems and associated electronic records on servers or other storage devices that are owned or operated by a third party (e.g., a cloud service provider). The broker-dealer or SBS Entity controls the electronic recordkeeping system and the access to the electronic records preserved on the system. Consequently, the third parties state that they cannot provide the undertaking required under Rules 17a-4 and 18a-6.

The Commission is amending the Rules 17a-4 and 18a-6 to address this development in electronic recordkeeping practices.³³⁶ Under the amendments, the third party may provide an alternative undertaking that is tailored to how cloud service providers hold electronic records for broker-dealers and SBS Entities. The use of this alternative undertaking is subject to certain conditions, including that the records are maintained on an electronic recordkeeping system and the broker-dealer or SBS Entity has independent access to the records, meaning, among other things, the broker-dealer can access the records without the need of any intervention of the third party. Consequently, the alternative undertaking cannot be used if the records maintained and preserved by the third party are not maintained and preserved by means of an electronic

³³⁵ This undertaking requirement is designed to address access to broker-dealer or SBS Entity records when they are held by a person other than the broker-dealer or SBS Entity and regardless of whether the records are in paper form, stored on micrographic media, or stored on an electronic recordkeeping system. It is separate from the third-party or executive officer undertakings requirements discussed above, which are designed to address access to records preserved and maintained on an electronic recordkeeping system irrespective of whether they are held by a third party.

³³⁶ See section II.G. of this release (discussing these amendments in more detail).

recordkeeping system (*e.g.*, it cannot be used if the records are in paper form). It also cannot be used if the broker-dealer or SBS Entity must rely on the third party to take an intervening step to make the records available to the broker-dealer or SBS Entity (*e.g.*, it cannot be used if the broker-dealer or SBS Entity must ask the third party to transfer copies of the records to the broker-dealer or SBS Entity or must ask the third party to first decrypt the records before they can be accessed). The final amendments are designed to accommodate the use of cloud service providers by broker-dealers and SBS Entities in manner that promotes the accessibility of the records.

In the alternative undertaking, the third party must, among other things, acknowledge that the records are the property of the broker-dealer or SBS Entity and that the broker-dealer or SBS Entity has represented to the third party that the broker-dealer or SBS Entity: (1) is subject to rules of the Commission governing the maintenance and preservation of certain records; (2) has independent access to the records maintained by the third party; and (3) consents to the third party fulfilling the obligations set forth in the undertaking. Further, the third party must undertake to facilitate within its ability, and not impede or prevent, the examination, access, download, or transfer of the records by a representative or designee of the Commission as permitted under the law. In the case of a broker-dealer, the third party must also undertake to facilitate within its ability, and not impede or prevent, a trustee appointed under SIPA to liquidate the broker-dealer in accessing, downloading, or transferring the records as permitted under the law.

Rules 17a-4 and 18a-6 require a broker-dealer or SBS Entity, respectively, to furnish promptly to a representative of the Commission legible, true, complete, and current copies of records required to be preserved under the rules and any other records subject to examination. The amendments to Rules 17a-4 and 18a-6 require the broker-dealer or SBS Entity to furnish a record and its audit trail (if applicable) preserved on an electronic recordkeeping system in a

reasonably usable electronic format, if requested by a representative of the Commission.³³⁷ This means the record will need to be produced in an electronic format that is compatible with commonly used systems for accessing and reading electronic records. The requirement to produce records in a reasonably usable electronic format will facilitate examinations and other regulatory reviews by making them more efficient.

Finally, the amendments to both rules remove or replace text to make them more technology neutral and to improve readability.

B. Legal Basis

Pursuant to Exchange Act Sections 15F(f) (15 U.S.C. 78o-10(f)) and 17(a) (15 U.S.C. 78q(a)), the Commission revises §§ 240.17a-4(f), (i), and (j) and 240.18a-6(e), (f), and (g) of title 17 of the Code of Federal Regulations.

C. Small Entities Subject to the Final Rules

As discussed above, the Commission estimates that approximately 3,508 broker-dealers and 19 SBS Entities will be subject to the new requirements as a result of the amendments to Rules 17a-4(f), (i), and (j) and 18a-6(e), (f), and (g), respectively. For purposes of this regulatory flexibility analysis, the Commission refers to broker-dealers that might be deemed small entities under the RFA as “small entities.”

Based on FOCUS Report data, the Commission estimates that as of December 31, 2021, approximately 744 of those broker-dealers might be deemed small entities for purposes of this analysis. Based upon the Commission’s prior RFA certification that adoption of Rule 18a-6 would not have a significant economic impact on a substantial number of small entities for the purposes of the RFA,³³⁸ the Commission believes that no small entities will be affected by the final amendments to Rule 18a-6.

D. Reporting, Recordkeeping, and Other Compliance Requirements

³³⁷ See section II.H. of this release (discussing these amendments in more detail).

³³⁸ See SBSD/MSBSP Recordkeeping Adopting Release, 84 FR at 68645.

The RFA requires a description of the projected reporting, recordkeeping, and other compliance requirements of the amendments to Rules 17a-4(f), (i), and (j) and 18a-6(e), (f), and (g), including an estimate of the classes of small entities that would be subject to the requirements and the type of professional skill necessary to prepare required reports and records. Following is a discussion of the associated costs and burdens of compliance with the final amendments, as incurred by small entities.³³⁹

The Commission does not believe that the compliance costs of the final amendments will be significant. The audit-trail alternative to should be consistent with existing broker-dealer practices. Broker-dealers have explained to the Commission that the electronic recordkeeping systems used for business purposes are dynamic and updated constantly (*e.g.*, with each new transaction or position) and easily accessible for retrieving records. The Commission believes that these contemporary electronic recordkeeping business systems, in many cases, can be configured to meet the audit-trail requirement in Rule 17a-4(f), as amended. Moreover, small broker-dealers could continue to preserve records on electronic recordkeeping systems that meet the WORM requirement.

The addition of the Designated Executive Officer requirement as an alternative to the Designated Third Party requirement should reduce the burden on small broker-dealers because they will be able to use an internal resource at no marginal cost rather than an external source to comply with the requirement. Moreover, retention of the Designated Third Party requirement as an alternative to the Designated Executive Officer requirement will permit small broker-dealers to continue with their existing arrangements.

The amendments requiring a broker-dealer to furnish a record and its audit trail (if applicable) preserved on an electronic recordkeeping system pursuant Rule 17a-4(f) in a reasonably usable electronic format, if requested by a representative of the Commission, should not

³³⁹ See section IV.D. of this release (discussing the total initial and annual reporting burdens and related costs for smaller broker-dealer, some of which will be small entities for purposes of the RFA).

impose a burden on small entities. Most existing electronic recordkeeping systems should have this capacity.

Finally, the amendments providing for the use of the Alternative Undertaking will accommodate the use of cloud service providers by small broker-dealers. This should provide them with more options for maintaining and preserving records in an electronic format by facilitating the use of cloud service providers for this purpose.

E. Duplicative, Overlapping, or Conflicting Federal Rules

The Commission does not believe that the final amendments impacting small entities that are broker-dealers would duplicate, overlap, or conflict with other Federal Rules.

F. Significant Alternatives

The RFA directs the Commission to consider significant alternatives that would accomplish its stated objective, while minimizing any significant economic impact on small entities. The Commission considered the following alternatives for small entities: (1) exempting broker-dealers that are small entities from the proposed requirements, to account for resources available to small entities; (2) establishing different requirements, including frequency, to account for resources available to small entities; (3) clarifying, consolidating, or simplifying the compliance requirements under the proposal for small entities; and (4) using performance rather than design standards.

The Commission considered exempting broker-dealers that are small entities from the new requirements and establishing different requirements for these firms.³⁴⁰ However, the Commission elected not to do so for a number of reasons, including: (1) the option for small entities to keep their records in paper or micrographic media, rather than electronically; (2) the importance of establishing requirements for reliable and secure electronic recordkeeping systems for broker-dealers; (3) the availability of multiple third-party vendors to provide the electronic

³⁴⁰ As stated above, the Commission does not believe any SBS Entities qualify as “small entities” for the purposes of the RFA.

recordkeeping services; and (4) the ability of small entities to continue to use existing WORM-compliant electronic recordkeeping systems.

In this vein, the Commission also considered eliminating the WORM alternative and requiring all broker-dealers to comply with an audit-trail requirement. This alternative would require all affected entities to modernize their recordkeeping systems to meet the audit-trail requirement. While this alternative could produce long-term compliance efficiencies for a greater number of affected participants, it would also require all affected entities with WORM-compliant systems to upgrade their electronic recordkeeping systems. The Commission elected not to propose this alternative because the accompanying compliance costs could be particularly burdensome for smaller entities and could have a disproportionate effect on smaller and medium-sized broker-dealers.

The Commission also considered simplifying compliance by proposing performance rather than design standards similar to the approach taken by the CFTC. The CFTC amended the electronic recordkeeping requirements by replacing prescriptive requirements for electronic recordkeeping systems with a principles-based approach.³⁴¹ The Commission believes that the final amendments establishing electronic recordkeeping requirements for broker-dealers will provide greater protection to the original records created and preserved by broker-dealers, thereby giving regulators more reliable and secure access to those records.³⁴² Moreover, the Commission believes that the final amendments address the same concerns accounted for in the CFTC's rule, namely the security and authenticity of and access to records. For these reasons, the Commission determined not to adopt principles-based rules.

VII. OTHER MATTERS

If any of the provisions of these rules, or the application thereof to any person or circumstance, is held to be invalid, such invalidity shall not affect other provisions or application

³⁴¹ See CFTC, *Recordkeeping*, 82 FR at 24480.

³⁴² See Section II.D.2. of this release (discussing why the Commission adopted the audit-trail requirement).

of such provisions to other persons or circumstances that can be given effect without the invalid provision or application.

Pursuant to the Congressional Review Act,³⁴³ the Office of Information and Regulatory Affairs has designated these rules as not a major rule as defined by 5 U.S.C. 804(2).

VIII. STATUTORY BASIS

The Commission is revising Rules 17a-4 and 18a-6 under the Exchange Act (17 CFR 240.17a-4 and 17 CFR 240.18a-6) pursuant to the authority conferred by the Exchange Act, including Sections 15F and 17.

List of Subjects in 17 CFR Part 240

Brokers, Confidential business information, Fraud, Reporting and recordkeeping requirements, Securities.

Text of Rule Amendments

For the reasons set out in the preamble, the Commission is amending title 17, chapter II of the Code of Federal Regulations as follows:

PART 240 — GENERAL RULES AND REGULATIONS, SECURITIES EXCHANGE ACT OF 1934

1. The authority citation for part 240 continues to read, in part, as follows:

Authority: 15 U.S.C. 77c, 77d, 77g, 77j, 77s, 77z-2, 77z-3, 77eee, 77ggg, 77nnn, 77sss, 77ttt, 78c, 78c-3, 78c-5, 78d, 78e, 78f, 78g, 78i, 78j, 78j-1, 78k, 78k-1, 78l, 78m, 78n, 78n-1, 78o, 78o-4, 78o-10, 78p, 78q, 78q-1, 78s, 78u-5, 78w, 78x, 78dd, 78ll, 78mm, 80a-20, 80a-23, 80a-29, 80a-37, 80b-3, 80b-4, 80b-11, and 7201 *et seq.*, and 8302; 7 U.S.C. 2(c)(2)(E); 12 U.S.C. 5221(e)(3); 18 U.S.C. 1350; Pub. L. 111-203, 939A, 124 Stat. 1376 (2010); and Pub. L. 112-106, sec. 503 and 602, 126 Stat. 326 (2012), unless otherwise noted.

* * * * *

³⁴³ 5 U.S.C. 801 *et seq.*

Section 240.17a-4 also issued under secs. 2, 17, 23(a), 48 Stat. 897, as amended; 15 U.S.C. 78a, 78d-1, 78d-2; sec. 14, Pub. L. 94-29, 89 Stat. 137 (15 U.S.C. 78a); sec. 18, Pub. L. 94-29, 89 Stat. 155 (15 U.S.C. 78w);

* * * * *

2. Amend § 240.17a-4 by:

- a. Revising paragraphs (f), (i), and (j).
- b. Removing the heading from paragraph (k).

The revisions read as follows:

§ 240.17a-4 Records to be preserved by certain exchange members, brokers and dealers.

* * * * *

(f) Subject to the conditions set forth in this paragraph (f), the records required to be maintained and preserved pursuant to § 240.17a-3 and this section may be immediately produced or reproduced by means of an electronic recordkeeping system or by means of micrographic media and be maintained and preserved for the required time in that form.

(1) For purposes of this paragraph (f):

- (i) The term *micrographic media* means microfilm or microfiche, or any similar medium;
- (ii) The term *electronic recordkeeping system* means a system that preserves records in a digital format in a manner that permits the records to be viewed and downloaded;
- (iii) The term *designated executive officer* means a member of senior management of the member, broker, or dealer who has access to and the ability to provide records maintained and preserved on the electronic recordkeeping system either directly or through a *designated specialist* who reports directly or indirectly to the designated executive officer;
- (iv) The term *designated officer* means an employee of the member, broker, or dealer who reports directly or indirectly to the designated executive officer and who has access to and the ability to provide records maintained and preserved on the electronic recordkeeping system

either directly or through a *designated specialist* who reports directly or indirectly to the designated officer;

(v) The term *designated specialist* means an employee of the member, broker, or dealer who has access to, and the ability to provide records maintained and preserved on, the electronic recordkeeping system; and

(vi) The term *designated third party* means a person that is not affiliated with the member, broker, or dealer who has access to and the ability to provide records maintained and preserved on the electronic recordkeeping system.

(2) An electronic recordkeeping system must:

(i)(A) Preserve a record for the duration of its applicable retention period in a manner that maintains a complete time-stamped audit trail that includes:

(1) All modifications to and deletions of the record or any part thereof;

(2) The date and time of actions that create, modify, or delete the record;

(3) If applicable, the identity of the individual creating, modifying, or deleting the record;

and

(4) Any other information needed to maintain an audit trail of the record in a way that maintains security, signatures, and data to ensure the authenticity and reliability of the record and will permit re-creation of the original record if it is modified or deleted; or

(B) Preserve the records exclusively in a non-rewriteable, non-erasable format;

(ii) Verify automatically the completeness and accuracy of the processes for storing and retaining records electronically;

(iii) If applicable, serialize the original and duplicate units of the storage media, and time-date the required period of retention for the information placed on such electronic storage media;

(iv) Have the capacity to readily download and transfer copies of a record and its audit trail (if applicable) in both a human readable format and in a reasonably usable electronic format and to readily download and transfer the information needed to locate the electronic record, as required by the staffs

of the Commission, the self-regulatory organizations of which the member, broker, or dealer is a member, or any State securities regulator having jurisdiction over the member, broker, or dealer; and

(v)(A) Include a backup electronic recordkeeping system that meets the other requirements of this paragraph (f) and that retains the records required to be maintained and preserved pursuant to § 240.17a-3 and in accordance with this section in a manner that will serve as a redundant set of records if the original electronic recordkeeping system is temporarily or permanently inaccessible; or

(B) Have other redundancy capabilities that are designed to ensure access to the records required to be maintained and preserved pursuant to § 240.17a-3 and this section.

(3) A member, broker, or dealer using an electronic recordkeeping system must:

(i) At all times have available, for examination by the staffs of the Commission, the self-regulatory organizations of which the member, broker, or dealer is a member, or any State securities regulator having jurisdiction over the member, broker, or dealer, facilities for immediately producing the records preserved by means of the electronic recordkeeping system and for producing copies of those records.

(ii) Be ready at all times to provide, and immediately provide, any record stored by means of the electronic recordkeeping system that the staffs of the Commission, the self-regulatory organizations of which the member, broker, or dealer is a member, or any State securities regulator having jurisdiction over the member, broker, or dealer may request.

(iii) For a broker-dealer operating pursuant to paragraph (f)(2)(i)(B) of this section, the member, broker, or dealer must have in place an audit system providing for accountability regarding inputting of records required to be maintained and preserved pursuant to § 240.17a-3 and this section to the electronic recordkeeping system and inputting of any changes made to every original and duplicate record maintained and preserved thereby.

(A) At all times, a member, broker, or dealer must be able to have the results of

such audit system available for examination by the staffs of the Commission and the self-regulatory organization of which the broker or dealer is a member.

(B) The audit results must be preserved for the time required for the audited records.

(iv) Organize, maintain, keep current, and provide promptly upon request by the staffs of the Commission, the self-regulatory organizations of which the member, broker, or dealer is a member, or any State securities regulator having jurisdiction over the member, broker, or dealer all information necessary to access and locate records preserved by means of the electronic recordkeeping system.

(v)(A) Have at all times filed with the designated examining authority for the member, broker, or dealer the following undertakings with respect to such records signed by either a designated executive officer or designated third party (hereinafter, the “undersigned”):

The undersigned hereby undertakes to furnish promptly to the U.S. Securities and Exchange Commission (“Commission”), its designees or representatives, any self-regulatory organization of which [Name of the Member, Broker, or Dealer] is a member, or any State securities regulator having jurisdiction over [Name of the Member, Broker, or Dealer], upon reasonable request, such information as is deemed necessary by the staff of the Commission, any self-regulatory organization of which [Name of the Member, Broker, or Dealer] is a member, or any State securities regulator having jurisdiction over [Name of the Member, Broker, or Dealer], and to download copies of a record and its audit trail (if applicable) preserved by means of an electronic recordkeeping system of [Name of the Member, Broker, or Dealer] into both a human readable format and a reasonably usable electronic format in the event of a failure on the part of [Name of the Member, Broker, or Dealer] to download a requested record or its audit trail (if applicable).

Furthermore, the undersigned hereby undertakes to take reasonable steps to provide access to the information preserved by means of an electronic recordkeeping system of [Name of the Member, Broker, or Dealer], including, as appropriate, downloading any

record required to be maintained and preserved by [Name of the Member, Broker, or Dealer] pursuant to §§ 240.17a-3 and 240.17a-4 in a format acceptable to the staff of the Commission, any self-regulatory organization of which [Name of the Member, Broker, or Dealer] is a member, or any State securities regulator having jurisdiction over [Name of the Member, Broker, or Dealer]. Specifically, the undersigned will take reasonable steps to, in the event of a failure on the part of [Name of the Member, Broker, or Dealer] to download the record into a human readable format or a reasonably usable electronic format and after reasonable notice to [Name of the Member, Broker, or Dealer], download the record into a human readable format or a reasonably usable electronic format at the request of the staffs of the Commission, any self-regulatory organization of which [Name of the Member, Broker, or Dealer] is a member, or any State securities regulator having jurisdiction over [Name of the Member, Broker, or Dealer].

(B) A designated executive officer who signs the undertaking required pursuant to paragraph (f)(3)(v)(A) of this section may:

(1) Appoint in writing up to two designated officers who will take the steps necessary to fulfill the obligations of the designated executive officer set forth in the undertakings in the event the designated executive officer is unable to fulfill those obligations; and

(2) Appoint in writing up to three designated specialists.

(C) The appointment of, or reliance on, a designated officer or designated specialist does not relieve the designated executive officer of the obligations set forth in the undertaking.

(4) A broker-dealer using a micrographic media system must:

(i) At all times have available, for examination by the staffs of the Commission, self-regulatory organizations of which it is a member, and any State securities regulator having jurisdiction over the member, broker, or dealer, facilities for immediate, easily readable projection or production of micrographic media and for producing easily readable images;

(ii) Be ready at all times to provide, and immediately provide, any facsimile enlargement which the staffs of the Commission, any self-regulatory organization of which it is a member, or any State securities regulator having jurisdiction over the member, broker, or dealer may request;

(iii) Store, separately from the original, a duplicate copy of the record stored on any medium acceptable under this section for the time required; and

(iv) Organize and index accurately all information maintained on both original and duplicate storage media.

(A) At all times, a member, broker, or dealer must be able to have such indexes available for examination by the staffs of the Commission, the self-regulatory organizations of which the broker or dealer is a member, and any State securities regulator having jurisdiction over the member, broker or, dealer.

(B) Each index must be duplicated and the duplicate copies must be stored separately from the original copy of each index.

(C) Original and duplicate indexes must be preserved for the time required for the indexed records.

* * * * *

(i)(1)(i) If the records required to be maintained and preserved pursuant to the provisions of § 240.17a-3 and this section are prepared or maintained by an outside service bureau, depository, bank, or other recordkeeping service, including a recordkeeping service that owns and operates the servers or other storage devices on which the records are preserved or maintained, (none of which operate pursuant to § 240.17a-3(c)) on behalf of the member, broker, or dealer required to maintain and preserve such records, such outside entity must file with the Commission a written undertaking in a form acceptable to the Commission, signed by a duly authorized person, to the effect that such records are the property of the member, broker, or dealer required to maintain and preserve such records and will be surrendered promptly on request of the member, broker, or dealer and including the following provision:

With respect to any books and records maintained or preserved on behalf of [Name of the Member, Broker, or Dealer], the undersigned hereby undertakes to permit examination of such books and records at any time or from time to time during business hours by representatives or designees of the Securities and Exchange Commission and to promptly furnish to said Commission or its designee true, correct, complete and current hard copies of any or all or any part of such books and records.

(ii)(A) If the records required to be maintained and preserved pursuant to the provisions of § 240.17a-3 and this section are maintained and preserved by means of an electronic recordkeeping system as defined in paragraph (f) of this section utilizing servers or other storage devices that are owned or operated by an outside entity (including an affiliate) and the broker, dealer, or member has *independent access* to the records as defined in paragraph (i)(1)(ii)(B) of this section, the outside entity may file with the Commission the following undertaking signed by a duly authorized person in lieu of the undertaking required under paragraph (i)(1)(i) of this section:

The undersigned hereby acknowledges that the records of [name of member, broker, or dealer] are the property of [name of member, broker, or dealer] and [name of member, broker, or dealer] has represented: one, that it is subject to rules of the Securities and Exchange Commission governing the maintenance and preservation of certain records, two, that it has independent access to the records maintained by [name of outside entity], and, three, that it consents to [name of outside entity] fulfilling the obligations set forth in this undertaking. The undersigned undertakes that [name of outside entity] will facilitate within its ability, and not impede or prevent, the examination, access, download, or transfer of the records by a representative or designee of the Securities and Exchange Commission as permitted under the law. Further, the undersigned undertakes to facilitate within its ability, and not impede or prevent, a trustee appointed under the Securities Investor Protection Act of 1970 to liquidate [name of member, broker, or dealer] in accessing, downloading, or transferring the records as permitted under the law.

(B) A broker, dealer, or member utilizing servers or other storage devices that are owned or operated by an outside entity has independent access to records with respect to such outside entity if it can regularly access the records without the need of any intervention of the outside entity and through such access:

(1) Permit examination of the records at any time or from time to time during business hours by representatives or designees of the Commission; and

(2) Promptly furnish to the Commission or its designee a true, correct, complete and current hard copy of any or all or any part of such records.

(2) An agreement with an outside entity will not relieve such member, broker, or dealer from the responsibility to prepare and maintain records as specified in this section or in § 240.17a-3.

(j) Every member, broker and dealer subject to this section must furnish promptly to a representative of the Commission legible, true, complete, and current copies of those records of the member, broker, or dealer that are required to be preserved under this section, or any other records of the member, broker, or dealer subject to examination under section 17(b) of the Act (15 U.S.C. 78q(b)) that are requested by the representative of the Commission. The member, broker, or dealer must furnish a record and its audit trail (if applicable) preserved on an electronic recordkeeping system pursuant to paragraph (f) of this section in a reasonably usable electronic format, if requested by a representative of the Commission.

* * * * *

3. Amend § 240.18a-6 by revising paragraphs (e) through (g) to read as follows:

§ 240.18a-6 Records to be preserved by certain security-based swap dealers and major security-based swap participants.

* * * * *

(e) Subject to the conditions set forth in this paragraph (e), the records required to be maintained and preserved pursuant to § 240.18a-5 and this section may be immediately produced or

reproduced by means of an electronic recordkeeping system and be maintained and preserved for the required time in that form.

(1) For purposes of this paragraph (e):

(i) The term *electronic recordkeeping system* means a system that preserves records in a digital format in a manner that permits the records to be viewed and downloaded;

(ii) The term *designated executive officer* means a member of senior management of the security-based swap dealer or major security-based swap participant who has access to and the ability to provide records maintained and preserved on the electronic recordkeeping system either directly or through a *designated specialist* who reports directly or indirectly to the designated executive officer;

(iii) The term *designated officer* means an employee of the security-based swap dealer or major security-based swap participant who reports directly or indirectly to the designated executive officer and who has access to and the ability to provide records maintained and preserved on the electronic recordkeeping system either directly or through a *designated specialist* who reports directly or indirectly to the designated officer;

(iv) The term *designated specialist* means an employee of the security-based swap dealer or major security-based swap participant who has access to, and the ability to provide records maintained and preserved on, the electronic recordkeeping system; and

(v) The term *designated third party* means a person that is not affiliated with the security-based swap dealer or major security-based swap participant who has access to and the ability to provide records maintained and preserved on the electronic recordkeeping system.

(2) An electronic recordkeeping system of a security-based swap dealer or major security-based swap participant without a prudential regulator must:

(i)(A) Preserve a record for the duration of its applicable retention period in a manner that maintains a complete time-stamped audit trail that includes:

(I) All modifications to and deletions of the record or any part thereof;

(2) The date and time of actions that create, modify, or delete the record;

(3) If applicable, the identity of the individual creating, modifying, or deleting the record;

and

(4) Any other information needed to maintain an audit trail of the record in a way that maintains security, signatures, and data to ensure the authenticity and reliability of the record and will permit re-creation of the original record if it is modified or deleted; or

(B) Preserve the records exclusively in a non-rewriteable, non-erasable format;

(ii) Verify automatically the completeness and accuracy of the processes for storing and retaining records electronically;

(iii) If applicable, serialize the original and duplicate units of the storage media, and time-date the required period of retention for the information placed on such electronic storage media;

(iv) Have the capacity to readily download and transfer copies of a record and its audit trail (if applicable) in both a human readable format and in a reasonably usable electronic format and to readily download and transfer the information needed to locate the electronic record, as required by the staffs of the Commission, or any State regulator having jurisdiction over the security-based swap dealer or major security-based swap participant; and

(v)(A) Include a backup electronic recordkeeping system that meets the other requirements of this paragraph (e) and that retains the records required to be maintained and preserved pursuant to § 240.18a-5 and in accordance with this section in a manner that will serve as a redundant set of records if the original electronic recordkeeping system is temporarily or permanently inaccessible; or

(B) Have other redundancy capabilities that are designed to ensure access to the records required to be maintained and preserved pursuant to § 240.18a-5 and this section.

(3) A security-based swap dealer or major security-based swap participant using an electronic recordkeeping system must:

(i) At all times have available, for examination by the staffs of the Commission or any State regulator having jurisdiction over the security-based swap dealer or major security-based swap participant, facilities for immediately producing the records preserved by means of the electronic recordkeeping system and for producing copies of those records.

(ii) Be ready at all times to provide, and immediately provide, any record stored by means of the electronic recordkeeping system that the staffs of the Commission or any State regulator having jurisdiction over the security-based swap dealer or major security-based swap participant may request.

(iii) For a security-based swap dealer or major security-based swap participant operating pursuant to paragraph (e)(2)(i)(B) of this section, the security-based swap dealer or major security-based swap participant must have in place an audit system providing for accountability regarding inputting of records required to be maintained and preserved pursuant to §240.18a-5 and this section to the electronic recordkeeping system and inputting of any changes made to every original and duplicate record maintained and preserved thereby.

(A) At all times a security-based swap dealer and major security-based swap participant must be able to have the results of such audit system available for examination by the staff of the Commission.

(B) The audit results must be preserved for the time required for the audited records.

(iv) Organize, maintain, keep current, and provide promptly upon request by the staffs of the Commission or any State regulator having jurisdiction over the security-based swap dealer or major security-based swap participant all information necessary to access and locate records preserved by means of the electronic recordkeeping system.

(v)(A) Have at all times filed with the Commission the following undertakings with respect to such records signed by either a designated executive officer or designated third party (hereinafter, the “undersigned”):

The undersigned hereby undertakes to furnish promptly to the U.S. Securities and Exchange Commission (“Commission”) and its designees or representatives, or any State securities regulator having jurisdiction over [Name of the Security-Based Swap Dealer or Major Security-Based Swap Participant], upon reasonable request, such information as is deemed necessary by the staff of the Commission or any State regulator having jurisdiction over [Name of the Security-Based Swap Dealer or Major Security-Based Swap Participant], to download copies of a record and its audit trail (if applicable) preserved by means of an electronic recordkeeping system of [Name of the Security-Based Swap Dealer or Major Security-Based Swap Participant] into both a human readable format and a reasonably usable electronic format in the event of a failure on the part of [Name of the Security-Based Swap Dealer or Major Security-Based Swap Participant] to download a requested record or its audit trail (if applicable).

Furthermore, the undersigned hereby undertakes to take reasonable steps to provide access to the information preserved by means of an electronic recordkeeping system of [Name of the Security-Based Swap Dealer or Major Security-Based Swap Participant], including, as appropriate, downloading any record required to be maintained and preserved by [Name of the Security-Based Swap Dealer or Major Security-Based Swap Participant] pursuant to §§ 240.18a-5 and 240.18a-6 in a format acceptable to the staff of the Commission or any State regulator having jurisdiction over [Name of the Security-Based Swap Dealer or Major Security-Based Swap Participant]. Specifically, the undersigned will take reasonable steps to, in the event of a failure on the part of [Name of the Security-Based Swap Dealer or Major Security-Based Swap Participant] to download the record into a human readable format or a reasonably usable electronic format and after reasonable notice to [Name of the Security-Based Swap Dealer or Major Security-Based Swap Participant], download the record into a human readable format or a reasonably usable electronic format at the request of the staff of the Commission or any State regulator having jurisdiction [Name of the Security-Based Swap Dealer or Major Security-Based Swap Participant].

(B) A designated executive officer who signs the undertaking required pursuant to paragraph (e)(3)(v)(A) of this section may:

(1) Appoint in writing up to two designated officers who will take the steps necessary to fulfill the obligations of the designated executive officer set forth in the undertakings in the event the designated executive officer is unable to fulfill those obligations; and

(2) Appoint in writing up to three designated specialists.

(C) The appointment of, or reliance on, a designated officer or designated specialist does not relieve the designated executive officer of the obligations set forth in the undertaking.

(f)(1)(i) If the records required to be maintained and preserved pursuant to the provisions of § 240.18a-5 and this section are prepared or maintained by a third party, including by a third party that owns and operates the servers or other storage devices on which the records are preserved or maintained, on behalf of the security-based swap dealer or major security-based swap participant, the third party must file with the Commission a written undertaking in a form acceptable to the Commission, signed by a duly authorized person, to the effect that such records are the property of the security-based swap dealer or major security-based swap participant and will be surrendered promptly on request of the security-based swap dealer or major security-based swap participant and including the following provision:

With respect to any books and records maintained or preserved on behalf of [SBSD or MSBSP], the undersigned hereby undertakes to permit examination of such books and records at any time or from time to time during business hours by representatives or designees of the Securities and Exchange Commission, and to promptly furnish to said Commission or its designee true, correct, complete, and current hard copies of any or all or any part of such books and records.

(ii)(A) If the records required to be maintained and preserved pursuant to the provisions of § 240.18a-5 and this section are maintained and preserved by means of an electronic recordkeeping system as defined in paragraph (e) of this section utilizing servers or other storage devices that are owned or operated by a third party (including an affiliate) and the security-based

swap dealer or major security-based swap participant has *independent access* to the records as defined in paragraph (f)(1)(ii)(B) of this section, the third party may file with the Commission the following undertaking signed by a duly authorized person in lieu of the undertaking required under paragraph (f)(1)(i) of this section:

The undersigned hereby acknowledges that the records of [SBSD or MSBSP] are the property of [SBSD or MSBSP] and [SBSD or MSBSP] has represented: one, that it is subject to rules of the Securities and Exchange Commission governing the maintenance and preservation of certain records, two, that it has independent access to the records maintained by [name of third party], and, three, that it consents to [name of third party] fulfilling the obligations set forth in this undertaking. The undersigned undertakes that [name of third party] will facilitate within its ability, and not impede or prevent, the examination, access, download, or transfer of the records by a representative or designee of the Securities and Exchange Commission as permitted under the law.

(B) A security-based swap dealer or major security-based swap participant utilizing servers or other storage devices that are owned or operated by a third party has independent access to records with respect to such third party if it can regularly access the records without the need of any intervention of the third party and through such access:

(1) Permit examination of the records at any time or from time to time during business hours by representatives or designees of the Commission; and

(2) Promptly furnish to the Commission or its designee a true, correct, complete and current hard copy of any or all or any part of such records.

(2) Agreement with a third party will not relieve such security-based swap dealer or major security-based swap participant from the responsibility to prepare and maintain records as specified in this section or in § 240.18a-5.

(g) Every security-based swap dealer and major security-based swap participant subject to this section must furnish promptly to a representative of the Commission legible, true, complete, and current copies of those records of the security-based swap dealer or major

security-based swap participant that are required to be preserved under this section, or any other records of the security-based swap dealer or major security-based swap participant subject to examination or required to be made or maintained pursuant to section 15F of the Act that are requested by a representative of the Commission. The security-based swap dealer and major security-based swap participant must furnish a record and its audit trail (if applicable) preserved on an electronic recordkeeping system pursuant to paragraph (e) of this section in a reasonably usable electronic format, if requested by a representative of the Commission.

* * * * *

By the Commission.

Dated: October 12, 2022.

Vanessa A. Countryman,

Secretary

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